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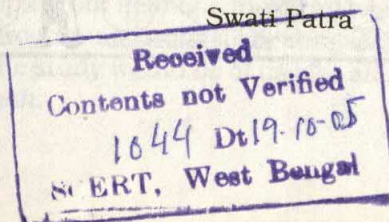
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Gandhiji's Talisman

I will give you a talisman. Whenever you are in doubt or when the self becomes too much with you, apply the following test:

Recall the face of the poorest and the weakest man whom you may have seen and ask yourself if the step you contemplate is going to be of any use to him. Will he gain anything by it? Will it restore him to a control over his own life and destiny? In other words, will it lead to Swaraj for the hungry and spiritually starving millions?

Then you will find your doubts and your self melting away.

M.K. Gandhi

EDITOR'S NOTE

The concern for protecting our environment for a sustainable development and harmonious life has been voiced and the need to educating our young children in schools towards a responsible citizenry for transmitting a safer universe to the next generation has been felt by educationist, educational planners and reformers. The directive principle of state policy on environment, Article 48A of the constitution (42nd Amendment 1977) says, "The state shall endeavour to protect and improve the environment and to safeguard the forests and wildlife of the country." Article 51A (g) has also laid down protection of environment as one of the fundamental duties of every citizen. It is a major issue and concern in the 21st century, particularly while educating the children in schools and preparing the teachers for future. The very first paper in this issue begins with the implication of environment education in teacher education by R.C. Sharma. The author advocates an inter disciplinary approach for roping in all sections of society for an effective way to educate our children in school.

Underachievement is one of major reasons for children dropping out of schools. Vineeta Sirohi has explored the relationship between underachievement and study habits and attitude. The result of the investigation reveals that the familial attitudes influence the interest of the child, and also the deficient school and home environment, the negative attitude towards the teachers, deficient self-confidence among underachievers are found to be the major reasons for underachievement. It has also been found by the study that the underachievers show negative attitude towards examination and have poor study habits.

Naresh Kumar Gupta's paper on communication through teleconferencing for educational purposes brings the experiences of teleconferencing with those who govern and are in *Punchayat Raj* Institutions and Village Education Committees (VEC) for reaching the unreached destinations for achieving the goal of education for all. The desire of the *Punchayati Raj* representatives to use the technology to solve their problems is note worthy.

The campaign for total literacy has had an impact on the community to achieve education for all. P. Adinarayana Reddy has evaluated the programme of total literacy campaign in his paper of evaluation of a district in Tamil Nadu. Findings of the evaluation, besides listing the strengths and shortcomings of the programme, give clues for improvement. Some of the recommendations are: (i) re-survey to identify the illiterates and semi-literates in the district; (ii) redesigning teaching-learning materials keeping in view of the need and local conditions; (iii) constitution of a team of task force by drawing the people from field of education, women and child welfare for effective monitoring of the programme; and (iv) meeting with associations of teachers and trade union leaders. The study would be of use for all those involved in the mission of *Sarva Shiksha Abiyan*.

Discussing the integrated education for children with disabilities, Bhushan Punani argues that establishing a system for monitoring of progress, allocation of adequate resources, adopting of the policy by different stake holders and different state machineries, promoting education approaches under the auspices of education system would bring favourable results for education of children with disabilities.

In their paper on perception of pupil teachers about predominant cultural issues, strategies about teaching and values, Girijesh Kumar, Jyoti and Bhatia, besides listing the cultural issues that are predominant, conclude that value teaching is best accomplished in an open and balanced way and need to be approached through an integrated curriculum not only in teacher education but also in school education.

Virendra P. Singh's paper on general school education in India and the development studies the major initiatives on the education development in general school education. The paper also looks beyond the present and provides the future dimension to the education policies and programmes for initiating necessary interventions.

Making learning activity-based and joyful is the base for sustaining the interest of the learners. The experimental study by B.N. Panda and Tapan Kumar Basantia by using the activity-based joyful learning approach as a strategy for achievement of interdisciplinary competencies finds that the experiment as a suitable strategy for achieving interdisciplinary Minimum Levels of Learning (MLLs) competencies in teaching of environmental studies.

Nasiruddin Khan explores the use of *will/shall and be going to* and future time reference in English by drawing on examples to subscribe the idea that the forms *will/ shall and be going to* are the most wide used ways of referring to future. The paper also presents the implications for teachers for effective teaching-learning in the classroom.

Swati Patra deals with the role of emotional intelligence in educational management by advocating the need for incorporating practices of emotional intelligence in management or organisational development leading to emotional quality management in the organisation.

The papers and articles of the issue have explored the various themes for bringing in qualitative improvement in the process and practices of the teaching-learning in the education of young children and youths in and out of school. Let us hope these intentions will impact on the prime actors of education – teachers, students, teacher educators and parents,

Academic Editor

Implications of Environmental Education in Teacher Education

R.C. SHARMA*

Abstract

Concern for preserving our environment for a sustainable development has been felt by all quarters. Education, particularly school education, could play a greater role by making an impact on the thinking of young minds to protect the universe from deterioration. This paper suggests ways to attack teacher education for bringing out effective changes in school education. Adopting to an inter disciplinary nature, the author suggests, the environment education should go beyond school boundaries for reaching to all sections of the society.

Key words: Teacher Education, Environmental Education

In ancient India students used to spend a number of years in *Guru's Ashram*. Guru was their father figure, a guardian, an advisor, a counsellor and a confidant. His wife was their mother figure. She cared for them like her own children. She cooked food for them and brought them up with maternal affection. Thus students acquired education in a cordial and secure atmosphere. They did not have to worry about paying fees and donations to their *Ashram* as education was free. Nor did they face any discrimination on account of the wealth or status of their parents. In fact, on no account they were harried or hectored.

Even during their illness their Guru secured medicines for them and the Guruyani (guru's wife) nursed them with tender feelings and great care. In return they performed their filial duties and paid obedience to the Guru and the Guruyani and helped them in household chores. In such an atmosphere it was but natural that proper interests, attitudes and values were formed and students acquired education in all domains of learning — cognitive, affective and psychomotor. Besides that they lived in a natural environment and cared for conserving it. They protected trees and revered them as *Vriksha Devta*,

* Former Commissioner, Kendriya Vidyalaya Sangathan, CS-81, Greater Kailash Part-II, New Delhi 110 048.

forests as *Van Devta* and rivers as holy sources of water such as the Ganga, the Yamuna, the Kaveri and so on. They called earth *Dharti Mata*. They cared for wildlife too. Words such as *Nag Devta*, *Kamdhenu* and *Kalpavriksha* symbolised their respect for wildlife and the benefits that could accrue from them. Accordingly, environmental education was an integral part of their educational and cultural system and students understood the need for conserving wildlife, ecosystems and abiotic environment.

Things however changed during the middle ages. The thrust on environment and all-round development of students was shifted to classroom instruction and learning of the 3 Rs (Reading, Writing and Arithmetic). Education came to be imparted in *Pathshalas* and *Madrasas* and the freedom given to students in Ashrams to ask questions gave way to the maxim, "Believe and do not ask questions". Blind compliance of teachers' orders was enforced and students came to be ruled with rods and ferules. In fact, the philosophy that came to prevail was that a child's mind was a receptacle into which teachers with the force of their indisputable authority could pour any amount of knowledge. Thus, the very spirit of learning which is observation, exploration, comprehension and application was sacrificed, and cramming of facts and rote memorisation became the order of the day. A concomitant of this rote-learning was rule-teaching. Accordingly, grammar and syntax which are a collection of rules were taught before language, and prosody before poetry, and multiplication tables before fundamental arithmetical

operations. This sort of knowledge was contrary to the basic nature of the child, for it involved learning inferences, axioms and abstractions without any reference to concrete and real things. Moreover, knowledge acquired without using senses, that it without touching, smelling, tasting, etc. was not likely to be assimilated and internalised. It went off the memory soon after the examination was over. Obviously environmental education, educational excursions, eco-treks and nature walks had no place in such a system.

This state of affairs further deteriorated during the seventeenth and eighteenth centuries. During this period Europe was making spectacular progress in science and technology. This was the period of industrial revolution in that continent, and industrial revolution brought forth in its array economic growth and military supremacy. Europe became a power to reckon with and Europeans thought that economic and social development in the rest of the world should follow their pattern. They further felt that their pattern was characterised by universal rationality or scientific outlook, control of environment, technological advancement and the absence of social conflict, and that all societies should acquire these attributes. August Comte was a great exponent of these views. He said that evolving and progressive societies pass through three stages: theological-militaristic, metaphysical-realistic, and scientific-industrial. Other European intellectuals also felt more or less the same way and concluded that their progress ideology should be followed by all societies and they should

be made to advance from the theological-militaristic to the scientific-industrial stage. For that matter, they felt, Europeans will have to assume responsibility to convert other civilisations to their model. This came to be known as "white man's burden" which gave a philosophical complexion to colonialism and led to the opening of industries in several countries.

The consequences of the European model of industrialisation were both intended and unintended. The intended ones were no doubt praiseworthy, for they resulted in economic development and consumer growth. But the unintended ones were worrisome, for they resulted in felling of trees, despoilation of forests, dereliction of land, etc. Neither the governments nor the social scientists did anything about them up to the middle of the twentieth century and environmental pollution continued unabated. Forests were denuded, effluents were discharged into rivers and lakes, or dumped onto common lands, and fossil fuels were burnt to produce energy for running factories. The consequences were pollution of air and water, degradation of land and emission of greenhouse gases. Air pollution caused irritation in eyes and diseases of respiratory tract and lungs and heart. Water pollution led to all kinds of bacterial and viral diseases such as typhoid, gastroenteritis, hepatitis A and E and so on. Greenhouse gas emissions added to global warming. All these happenings led the international community in the 1970s to call a halt to indiscriminate exploitation of natural resources. Both industry and other organisations which

caused pollution of air and water, denudation of forests, desertification of lands, loss of bio-diversity, emission of greenhouse gases were advised not to discharge untreated sewage into rivers, streams and lakes. However, all schools did not move into high gear to fight against pollution till the 1990s. It was in this decade that Environmental Studies (EVS) was introduced at the primary level as a distinct subject in Classes I and II and as a part of social studies and science from Class III upwards. This was indeed a good beginning as it has created an awareness among students about environmental problems but it has not created in them an urge for solving them or for doing their mite towards solving them. It has certainly not changed their attitudes and values. Nor has it motivated them to participate in eco-friendly activities, programmes of cleanliness, planting of trees, etc. It is high time this was done because schools and colleges are the formal institutions where students develop their attitudes and values and where activities are deliberately carried out to shape students personalities. Moreover, the Supreme Court has directed every Education Board to take steps to enforce compulsory education on environment in a graded way in all schools.

This however cannot be done effectively, that is, Environmental Education cannot be introduced in schools in an effective manner unless teachers who teach various topics are well-informed and well-read in Environmental Studies. They should know and understand what environmental education is, what its

subject matter is and how it should be taught in schools, and how students' attainments should be measured or evaluated. Such teachers can only be available if environmental education finds a place in the curriculum of the institutions or colleges of teacher education. It may be mentioned in this context that environmental education has its unique characteristics and because of these characteristics its teaching methodology cannot be the same as that of other subjects. Teacher education institutions have to evolve this methodology and to work out strategies so that teaching-learning through, about and for environment is effective and result-oriented and students' involvement in conservation and regeneration of environment is furbished up. Turning back to the uniqueness of environmental education it may be said that it is unique for several reasons.

Firstly, it lays emphasis not only on cognitive domain but more so on affective and psychomotor domains and is an applied subject in which the knowledge acquired and the attitudes developed must result in actions aimed at controlling pollution, conserving natural resources and ensuring that environment is used prudently so as to promote sustainable development. Secondly, it owes its existence to several disciplines and is therefore a multi-disciplinary branch of learning as contrasted with pure disciplines like Mathematics or History, etc. Thirdly, its teaching-learning cuts across the rigid boundaries of the classroom or the precincts of the school and goes beyond to bring within its ambit many institutions, organisations, governmental

departments, NGOs and civic bodies which deal in environmental matters. Fourthly, it involves both collateral and vertical co-ordinations. By collateral coordination is meant co-ordination with other organisation, institutions, Government departments, schools, local bodies which are busy in the pursuit of conserving and regenerating environment. Vertical coordination means coordination with those in the administration – Education Officers, Deputy Directors and others in the hierarchy. Fifthly, the methodology of teaching environmental education is different from that of teaching other subjects like languages, philosophy, sociology, etc. Sixthly, the methods and techniques of evaluation are different for measuring students' achievement in environmental education than in other subjects. All these points are discussed in the following paragraphs.

1. *Greater Emphasis on Affective and Psychomotor Learning:* Affective and psychomotor learning are indeed very important because cognition is involved in all areas of learning. Without cognition nothing can be learned. Cognition in environmental education includes: knowledge of terminology such as air pollution, water pollution, noise pollution, soil erosion, bio-diversity, wildlife, poaching, taxidermy, trophy, forests, sanctuaries, national parks, zoos, museums of natural history, sewage, coliform, suspended particulate matter (SPM), respiratory suspended particulate matter (RSPM), Dissolved Oxygen (DO), BOD, decibels, etc. It also includes knowledge of specific facts such as sources of air and water and noise pollution, effect of pollution on humans,

permissible limits of pollution in air, water, etc. Further it includes knowledge of the ways of organising, studying, judging, criticising data, trends, categories, principles, opinions pertaining to various aspects of environmental education, and knowledge of methods of teaching this subject. Cognition also includes comprehension, application, analysis, synthesis, and evaluation of concepts, materials and methods used in environmental education. Cognitive domain has, therefore, its own place which is important in its own right. But perhaps a greater emphasis ought to be laid on affective and psychomotor domains.

Affective domain merits a greater emphasis in the teaching-learning of environmental education because it is concerned with developing in students an interest in environmental problems and building in them attitudes and values and commitments favourable to conservation and regeneration of environment. It is not so in cognitive domain. In cognitive domain, we are merely concerned with the fact that a student knows and understands a task and can perform it satisfactorily but it does not mean that he is interested in the task and feels positively about it and will do it. In other words, in affective domain the emphasis is on evincing interest in a task, feeling favourable about it, and being motivated to undertake it. Accordingly, affective domain with its emphasis on interests, attitudes, values and commitment provides a very important set of objectives which have got to be accomplished so that students become

not only alive to environmental problems but also they become committed to solving them. It may be further argued that readiness to do is perhaps a more desirable goal than readiness to know, however, without knowing a task, one cannot perform it but knowing is not enough because it has been found that in some cases a knowledgeable person may be a great scoundrel, a criminal if he does not have a proper value base. He may sell even nuclear secrets to terrorists and thus contribute towards a holocaust. Hence, holding correct beliefs and sharing positive values acquire primacy particularly in the context of environmental education, for in Environmental education our focus is on doing, that is, on conserving and regenerating environment. Accordingly, greater emphasis is to be laid in environmental education on affective domain. For the same reason psychomotor objectives acquire primacy because their attainment enables students to participate in environmental activities using their own hands, activities such as planting of saplings, maintaining a nursery, caring for a sick animal, keeping home and neighbourhood and school clean, spreading environmental awareness in their community and so on.

To sum up, it may be said that in most of the subjects such as Mathematics, Science and Linguistics it is cognitive development which acquires the highest priority but in environmental education it is the psychomotor and affective domains which become first among the equals. This fact has to be noted down while framing and administering teacher education

programmes so that all teachers of environmental education become convinced that their job does not end with their teaching in the school various concepts, and technical terms but it also includes motivating children to participate in environment-related activities such as conservation of biodiversity, water harvesting, cleanliness of surroundings, etc.

2. Multidisciplinary Character: A second characteristic of environmental education is that it is a multidisciplinary area of learning. By saying so it is not meant that it is an ensemble of zoology, botany, forestry, agriculture, chemistry, physics, etc. It is in fact, a composite subject as environment itself is a composite whole. Its form and substance give it the shape of an applied body of knowledge as engineering is. Engineering is not physics or chemistry or geology, it is a composite body of knowledge and has to be learned as such. So is environmental education. It has got to be studied as a composite subject to be taught by teachers trained in it and cannot be left to be taught by the biology or physics or chemistry or history or geography teacher unless the teacher has learnt it during a pre-service or an in-service teacher education programme.

By saying so it is not contemplated that environmental education should be introduced as a separate subject. It would continue to be incorporated in social studies, science and language books as it is at present but its contents would be graded and sequential (as in a spiral curriculum). Moreover, the principle of interdependence has got to be highlighted and explained in detail,

for environment is a composite whole in which biotic and abiotic environment are so intertwined that one cannot exist without the other. Even in biotic environment, one species depends upon others for food. This fact becomes abundantly clear when we think of food chains, food webs and food pyramids. To illustrate this point further, we may say that plants depend upon minerals and water in the soil and chlorophyll in them and on sunlight to make their food. They are thus producers. They are food for first order consumers, first order consumers are food for second order consumers and so on. For example, grass (a producer) is eaten by a grasshopper (a first order consumer), and so on. Thus, it will be seen that there is an interdependence in the environment. Programmes of environmental education have to highlight this principle of interdependence on the one hand and on the other the compositeness of its substance and form so that it is not taught in a truncated way, that is, biology part by a biology teacher, chemistry part by a chemistry teacher and so on. In fact, every teacher should be accomplished in environmental education and should be able to direct learning in this subject.

3. Environmental Education cuts across School Boundaries: A third feature of environmental education that has implications in teacher education is that it cuts across school boundaries. Its theoretical aspects can, no doubt, be taught and learned within the leaden atmosphere of the classroom but correct perceptions cannot be formed unless students move out to watch sources of water and air pollution in real life

situations, or unless they go to national parks and sanctuaries to watch the rare species of wild animals and so on. To further illustrate this point it may be said that unless one sees of barking deer bark, one cannot realise how raucous a scream it produces. Similarly, unless one sees a musk deer, one cannot appreciate the fragrance it emits. Visits to zoos, sewage treatment plants, thermal power stations, etc. are therefore an integral part of the teaching-learning of environmental education. So are field trips, trips to observe floods caused by denudation of forests, landslides in fragile hills, destruction of eco-systems caused by fire, methods of water harvesting followed at various places, biogas plants installed in villages, electrification of rural areas by using non-conventional sources of energy, and so on.

4. *Horizontal and Vertical Co-ordinations:* The foregoing field trips, excursions and visits would only be possible if schools establish contacts with various departments and organisations. For instance, for visits to national parks and sanctuaries they have to establish and maintain contact with the conservator of wildlife controlling the part or sanctuary they intend to visit. This contact is needed not only to seek his permission for the visit but also to know what wildlife they will be able to spot and observe to learn about its habits and habitats. Similarly, a visit to a Pollution Control Board would help them in learning about the sources of air and water pollution and where and how they are tested and what measures the Board is taking to monitor and control pollution. Many other such

places could be mentioned, as for example, sewage treatment plants, thermal power stations, chemicals and fertilisers factories, etc. Besides these places visits will also have to be made to other schools and organisations which are engaged in the work of conservation and regeneration of environment so that combined efforts could be made and ameliorative steps taken in tandem. Now visiting these places, educational excursions and field trips involve expenditure. How this expenditure would be met would have to be decided in consultation with the line officers – Principals, Education Officers, etc.

5. *Methodology of Teaching-Learning:* In line with the characteristics of environmental education mentioned above, the methodology of teaching-learning will have to be evolved. Obviously it would be different from the chalk and talk or the so-called lecture method. This method, whenever required, would be confined to transmitting information which students cannot acquire on their own. The rest would be acquired by heuristic method which means encouraging students to discover for themselves. Discovering for themselves implies learning on the basis of visits, excursions, nature walks, eco-tourism, trekking, field trips, studies and library consultation. In all these activities the concerned teacher would be the *primus inter pares*. He would subtly direct learning, avoiding telling, commanding and instructing students. Thus one-way communication, from teacher to students, would give way to multiple way communication – students would communicate among themselves, with their teacher and with officials.

Obviously such communication implies discussions, exchange of notes and development of understanding about the flora and fauna, sources of pollution of air and water in the neighbourhood, measurement of noise level at various places, sources of pathogens and vectors in the community, bacterial and viral diseases resulting from environmental pollution and so on. Here it may be stated unequivocally that it would be the responsibility of the teacher to direct learning, for students cannot be left free to do whatever they like. Accordingly, the role of the teacher would be to ensure that students plan their outings meticulously in a democratic manner under the implicit leadership of the teacher. So also it would be the responsibility of the teacher to see that students carry out their field work conscientiously and peacefully, that is, without wrangling among themselves and without picking up quarrel with outsiders. If out of station tours are arranged, attention will also have to be paid to safe travelling and proper boarding and lodging arrangements and first-aid facilities.

6. *Methods and Techniques of Evaluation*: These have to reflect the points raised in the characteristics described above, beginning from emphasis on affective and psychomotor development to the methodology of teaching-learning. In this connection it may be mentioned that items for measuring cognitive domain have been amply given in the book, *Environmental Orientation to School Education* published by the NCERT in four volumes in 2001 (one each for Northern,

Southern, Eastern and Western Regions). These volumes are no doubt very useful as resource material for teachers, for they provide insights into environmental problems and present concepts in a lucid way. Their main strength lies in delineations of activities germane to learning environmental concepts. At the end of each activity is given a litany of testing items. But these items and activities are mainly confined to cognitive domain. The NCERT may like to carry out a similar exercise in affective and psychomotor domains so that the materials developed could be used for developing teachers and through them in students attitudes, values and commitments for fighting against pollution and that the materials may also help learn skills for participation in constructive programmes such as afforestation, water harvesting, popularising water borne lavatories, keeping environment clean and so on.

In conclusion it may be said that pollution can only be controlled, if people decide to control it, for it is they who pollute it. It is they who as individuals throw litter onto the roads, and as employees of municipalities or factories discharge sewage and effluents into rivers, streams and lakes. It is they who discharge diesel-fumes into the air and so on. So if pollution is to be controlled it is people who have to come forward to control it, it is people who have to conserve environment and participate in activities aimed at regenerating it. People can no doubt be coerced into these activities through appropriate legislative measures. Penal action can be taken against those who violate environmental laws but such action and other deterrent

measures would not fully solve the problem. The problem would only be solved if people's awareness of environmental issues is enhanced and their attitudes and values are improved, which can only be done through education. Masses have to be educated about the hazards caused by air, water, land and noise pollution and about the need for proper use of natural resources so that sustainable development is secured. Media can play an important role in this. But the role of formal educational institutions will still be greater, for in general one member from each family goes to school. If this member is properly oriented, he can change his family members and the neighbourhood and the community he

lives in. Moreover, students and teachers can take up environmental activities in rural as well as urban areas under social service programmes and can act as change agents in communities. They can participate in water harvesting activities, in propagation of the use of biogas and non-conventional sources of energy, in popularising water-borne lavatories and so on. Now schools can do all this if they have properly qualified and motivated teachers on their staff. Such teachers can only be available if every prospective and existing teacher undergoes a pre-service or an in-service education, which means that environmental education should be a compulsory subject in all Teachers' Colleges and Institutes of Education.

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A Study of Underachievement in Relation to Study Habits and Attitudes

VINEETA SIROHI*

Abstract

The present investigation aims at studying the contribution of the areas related to attitude towards teacher, home and school environment, attitude towards education, study habits, mental conflict, concentration, home-assignment, self-confidence and examination, in causing underachievement. A sample of 1000 Elementary Grade students were taken from X Composite Schools of South District, Delhi. Underachievers thus identified were studied by administering study habits and attitudes test, which indicated the need for guidance programme for this special group specially in the area of study habits as this area was found to be deficient in most of the underachievers. Guidance programme shall lead to better results, improving the achievement of the students and thus their potentialities be maximally utilised.

Key words: Underachievement, Study Habits and Attitudes

Education aims at tapping the potentialities of an individual to the maximum. Efforts are made to make the teaching-learning process most effective. Sometimes we hear that some student is bright and intelligent still he/she does not score good marks. Such instances show that many school children work far below than what could be expected of their level of intellectual functioning. Consequently a great deal of intellectual potential is wasted. School performance

constitutes another aspect of cognitive growth. About three decades back the excellence in academic performance was viewed in terms of scores alone irrespective of the basic potential. An 'underachiever' is one whose academic performance falls below the normative range of his potentialities. By underachievement we refer to that level of attainment which does not measure up to the potential capabilities of the individual. There are many factors

* Lecturer, District Institute of Education and Training, Darya Ganj, New Delhi.

responsible for underachievement like, motivation, study habits, attitude towards teacher, attitude towards education, school and home background, concentration, mental conflicts, level of aspiration, self-confidence, examination fear, etc.

"Poor habits of study not only retard school progress but develop frustration, destroy initiative and confidence and make prominent the feeling of worthlessness towards himself and the subject of study whereas effective methods ensure success, happiness and sense of accomplishment" — Smith, Sammuel and Little Field (1948). In other words the quantitative aspect of study is more important than qualitative aspect, that is, if the style of study is good then it may yield better results as compared to the time devoted to it. Another important aspect is to have a right and positive attitude. An attitude is taken to be the readiness to act in a certain way expressed by a person's words, gestures or facial expressions. A teacher must take account of learner's attitudes and if necessary build up new attitudes in order to facilitate the learning of skills and knowledge. "Good work habits and skills are not acquired theoretically or in vacuum, it is proper habit of work and insistence on them in every detail and over a long period of time that create right attitudes and values" (Secondary Education Commission, 1952).

The underachievers need some form of special help or remedial education and guidance to overcome their difficulties and achieve up to the maximum of their potential. To plan remedial education and guidance programme for

underachievers we need to know about the factors related to and their possible contribution towards underachievement. This has led to the present investigation entitled *A study of underachievement in relation to study habits and attitudes* aiming at finding the possible contribution of study habits and attitudes in causing underachievement.

Methodology

Sample: The study was carried out on a sample of 1000 students of Elementary Grade of X Composite Schools of South District of Delhi.

Tools: The tools administered in the study were:

- (a) General Mental Ability Test by Jalota.
- (b) Teachers made Achievement Tests.
- (c) Test of Study Habits and Attitudes by Mathur.

The study habits test is based on nine major areas of the study techniques, habits and attitudes, viz, Attitude towards teachers; School and home environment; Attitude towards education, study habits; Mental conflict; Concentration; Home assignment; Self-confidence; and Examination, and contains 60 items.

Procedure: The General Mental Ability Test was administered on 1000 students and then Achievement Tests in the four subjects – Hindi, Mathematics, Social Studies and Environmental Science, were administered on these students. On the basis of the Raw Scores of Intelligence Test and Achievement Test Stanines of both Intelligence and Achievement for each student were compared to identify underachiever. A Stanine difference of 3 was identified as

underachiever. Thus, out of 1000 students 81 students were identified as underachievers. Then Study Habits Test was administered on these underachievers to look into the contribution of nine areas in underachievement.

- Scoring Key A indicates the scores for correct study habits.
- Scoring Key B indicates the area of deficiency for guidance purposes.

Results

By analysing the data, 81 out of 1000 students were identified as underachievers. Table 1 indicates that 98.7% of the underachievers tend to possess unfavourable attitude towards teacher and needed guidance. 92.5% of underachievers indicated deficiency in school and home environment, 24.6% in attitude towards education, 100% in study habits, 72.8% faced mental conflicts, 97.5% had poor concentration. 70.3% had problems related to home assignments, 72.8% were low in self-

confidence and 96.2% lacked proper attitude towards examination. The above findings show that study habits is the most prominent area where all the underachievers need guidance and its contribution to underachievement is maximum. Attitude towards teachers, concentration and examination are also areas that need to be taken care of.

From the above analysis it is easier to diagnose and locate the areas which need guidance so that they can be dealt specifically.

The bar graph reflects the highest percentage (100%) in the area of study habits, highlighting the fact that it is the most prominent factor contributing to underachievement. Attitude towards teacher, concentration and examination also represent high percentage indicating that these major areas need guidance for underachievers mental conflicts, home assignments and self-confidence represent a lower percentage and attitude towards education is at the lowest level.

TABLE 1

Areas	Incidence Scores	%
Attitude towards Teacher	80	98.7
Schools and Home Environment	75	92.5
Attitude towards Education	20	24.6
Study Habits	81	100
Mental Conflict	59	72.8
Poor Concentration	79	97.5
Home Assignment	57	70.3
Self-confidence	59	72.8
Attitude towards Examination	78	96.2

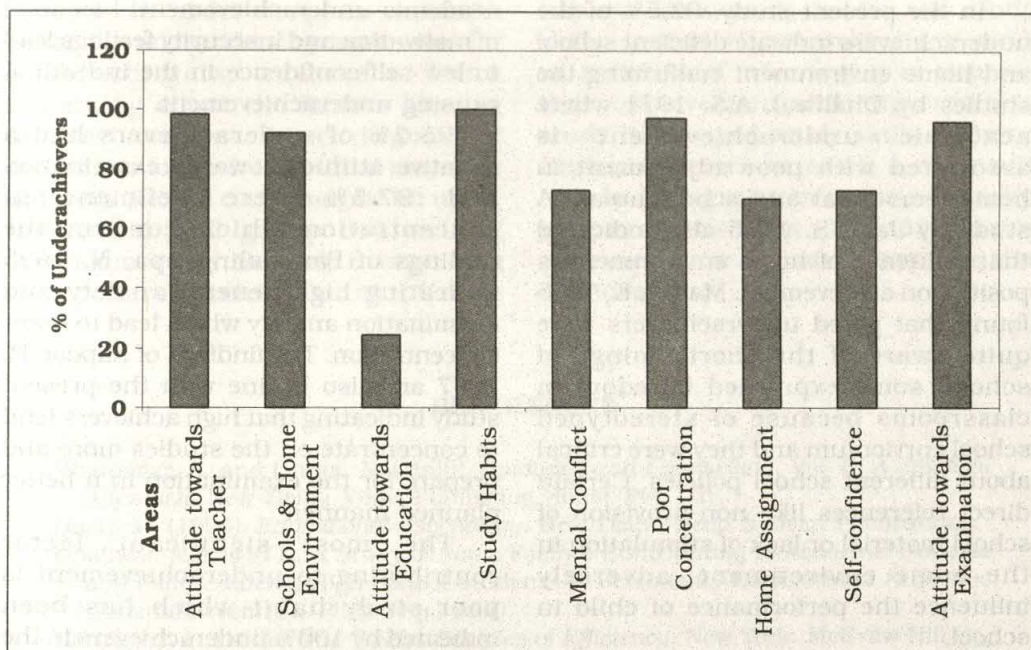


Fig. 1: Graphical Representation of % of Incidence Scores of Underachievers in Nine Areas

TABLE 2

Category of Study	Incidence Habits	Percentage
Very Poor	3	3.70
Poor	39	48.14
Satisfactory	37	45.67
Good	2	2.46

Table 2 shows the percentage of underachievers category-wise regarding study habits. 48.14% of the underachievers are poor in study habits whereas 3.70% are very poor, 45.67% have satisfactory study habits and 2.46% have good study habits, still they are underachievers indicating the fact that there are other variables than study habits which are responsible for

underachievement in such cases. A major portion of the sample is having poor study habits which is a point of concern. If improvement in the study style and attitudes is brought about it may yield better results.

Discussion

In various studies done on underachievers it is found that familial attitudes strongly influence the interest of the child. The home which sets narrow limits provides poor learning experiences, shares less with the school is the one which fosters negative attitude to learning. In such cases parents should also be guided to broaden the domain of interest and attitudes.

In the present study, 92.5% of the underachievers indicate deficient school and home environment confirming the studies by Dhaliwal, A.S. 1971 where academic underachievement is associated with poor adjustment in home, emotional and school areas. A study by Jain, S. 1965 also indicated that influence of home environment is positive on achievement. Maitra, K. 1985 found that gifted underachievers were quite aware of the shortcomings of school, some expressed boredom in classrooms because of stereotyped school curriculum and they were critical about different school policies. Certain direct references like non-provision of school material or lack of stimulation in the home environment, adversely influence the performance of child in school.

98.7% of underachievers show negative attitude towards teacher which is in line with the findings of Maitra, K. 1985 reflecting on indifferent attitude of underachievers towards the quality of teaching, type of teachers or teaching strategies. Teachers influence is important. Teachers with lack of understanding and acceptance often provides a psychological climate which precipitates a negative attitude.

Self-confidence was found to be deficient in 72.8% of underachievers which also confirm the study of Panchalingappa, N. 1995 indicating low achievement, motivation as an indicator for underachievement in mathematics. Our findings are also in line with the findings of Dhaliwal, A.S. and Srivastava, A.K. 1967 indicating insecurity feelings and low academic motivation respectively as factors associated with

academic underachievement. Low level of motivation and insecurity feelings lead to low self-confidence in the individual causing underachievement.

96.2% of underachievers had a negative attitude towards examination and 97.5% were deficient in concentration which confirm the findings of Panchalingappa, N. 1995 indicating high general anxiety and examination anxiety which lead to lower concentration. The findings of Kapoor, R. 1987 are also in line with the present study indicating that high achievers tend to concentrate on the studies more and prepare for the examination in a better planned manner.

The most significant factor contributing to underachievement is poor study habit which has been indicated by 100% underachievers in the present study. This is also confirmed by the findings of Panchalingappa, N. 1995; Dhaliwal, A.S. 1971; Jain, S.K. 1967; Jha, V. 1970; Vanarase, S.J. 1970; Srivastava, A.K. 1967; Kapoor, R. 1987 and Singh, H. 1984.

In view of the above analysis we may conclude that underachievement is a result of a combined effect of many variables, which need that diagnosis first to make a remedial programme.

Implications

The present study has implications for guidance and preparing a remedial programme for underachievers. We find that in schools the teaching-learning process is catering to the needs of only the average students where special groups like creative, slow learners, first generation learners and underachievers are neglected. There is an urgent need

to look into the needs of these special groups. In order to plan remedial education and guidance programmes for underachievers, we need to know something about the factors causing underachievement. Proper diagnosis of the factors for each individual may save time and the real cause may be hit upon. Individual and group counselling programmes may also help in improving the general achievement. Group

guidance procedures can be used to improve their study habits and study skills. Individual counselling can serve as an effective intervention to improve their achievement and improve their study habits and study skills. Helping underachievers in such a way will surely bring out better results by proper utilisation of individual's potentialities and thus realising the aim of education.

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Communication through Teleconferencing

An Educational Perspective

NARESH KUMAR GUPTA*

Abstract

Adoption of flexible delivery has not only been restricted to higher education settings but the skill of the participants and knowledge of understanding of the nature of change can even be assessed by primary learner/teacher and the community members. Awareness and access with the delivery initiatives made by the stakeholders has made the dream come true. With this background, the present paper has tried to share the experiences of teleconferencing, a third generation communication mode for the education of masses. A two-way interactive mode has been very well used with Panchayati Raj institution members in the form of teleconferencing. The paper deals with the evolution of communication models and relevance in education besides highlighting the use of teleconferencing for primary education. A successful attempt with Village Education Committee (VEC) has also been shared in this paper.

Key words: Teleconferencing, Sarva Shiksha Abhiyan

In the fast developing world and the explosion of knowledge, access to current literature through print media has become somewhat difficult. Emphasis on flexibility and on independence of learning is opening new doors. Use of communication technology opens up increasing avenues for sharing up-to-date material at the doorstep. The students and the faculty need not be confined to the four walls of an

institution for learning. People living physically apart can share knowledge, skill and resources. Power of modern information technologies to increase access to educational resources need to be understood for this. It may be useful to employ a framework developed by Taylor (1996) in describing the evolution of distance education delivery. In *Modes of Distance Education : A Conceptual Framework*, Taylor outlines four

*Reader, Department of Educational Research and Policy Perspectives, NCERT, New Delhi 110 016.

generations of delivery technologies along with his perceptions of the corresponding characteristics of each. Table 1 describes details of these four generations.

Without debating the validity of Taylor's analysis on the modes of communication and their evolution, it

can be observed that these models have all been tried at length and used in the country and abroad for various purposes including education. Each delivery generation and each delivery model has its own inherent advantages and use, whereas the institutions move towards more flexible delivery and online models,

TABLE 1
Modes of Delivery and their Characteristics

Delivery Technology	Characteristics				
	Flexibility			Highly Refined Materials	Advanced Interactive Delivery
	Time	Place	Pace		
First Generation The Correspondence Model Print	Yes	Yes	Yes	Yes	No
Second Generation The Multi-media Model					
(i) Print	Yes	Yes	Yes	Yes	No
(ii) Audio-tape	Yes	Yes	Yes	Yes	No
(iii) Video-tape	Yes	Yes	Yes	Yes	No
(iv) Computer-based Learning (CML/CAL), etc.	Yes	Yes	Yes	Yes	Yes
(v) Interactive Video (disc and tape)	Yes	Yes	Yes	Yes	Yes
Third Generation The Tele-Learning Model					
(i) Audio teleconferencing	No	No	No	No	Yes
(ii) Video conferencing	No	No	No	No	Yes
(iii) Audiographic communication	No	No	No	Yes	Yes
(iv) Broadcast TV/Radio+Audio teleconferencing	No	No	No	Yes	Yes
Fourth Generation The Flexibility Learning Model					
(i) Interactive Multi-media	Yes	Yes	Yes	Yes	Yes
(ii) Internet-based access to www resources	Yes	Yes	Yes	Yes	Yes
(iii) Computer-mediated communication	Yes	Yes	Yes	No	Yes



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i.e. Taylor's fourth generation of delivery, will require policies and procedures to manage such areas as student selection, enrolment, progression and faculty/department management of teaching and learning processes. No doubt, it is in these areas real and significant opportunities tend to "value add" to the learner's (and teacher's) educational experience.

Though sincere efforts have been made on the part of the Government of India to spread technology to the remotest part of India, yet it may take time for a common man to have all these media within one's reach. The Fourth Generation Flexibility Learning Model of Taylor is still not within the reach of more than half of the Indian population. But it was observed that the third Generation Model of Distance Education was discovered to be suitable and gradually focussed greater attention on learning support to individual student and was appreciated as a student-centric system. The growth of the system at a fast pace led to its appreciably dynamic absorption of capabilities in the areas of information, communication technology and its use in all spheres. Learning by visualisation, i.e. teleconferencing has emerged as an effective and important tool for the teaching-learning process, whereby any person may communicate with and interact with a large number of persons or a large target group of learners through downlinks at various locations situated in villages, remote areas, community centres, etc.

Baseline survey of DPEP states shows that all these states need a variety of efforts to train on a recurrent basis,

their teachers and other supportive or managerial functionaries with a wide variety/range of training needs. It was accepted that any single strategy or approach to training would be highly inadequate to carry out this enormous task. Keeping in view the expertise and experience available with IGNOU and NCERT, it was decided to include Distance Education Programme for such training in the primary education sector in the plans of DPEP-II, mobilising their resources under MHRD sponsorship. To build the capacity among institutions and people at National, State, District and Sub-district levels in designing, producing and delivering Distance Learning inputs and materials, DEP-DPEP has strived hard in a historic stride towards this direction. Self-Instructional Materials (SIMs) were the first structured and pedagogically sound materials developed with its help followed by audio/visual interventions including the radio programmes that were some strategies used by DEP in delivery of learning inputs/packages.

The major changes in the delivery mode that followed with satellite and television expansion was one-way broadcasting communication from central source to the learners in two-way teacher-learner interactive broadcast, popularly known as teleconferencing. Though this teleconferencing mode is being tried in India for more than two decades, but it could gain popularity and expansion with respectability only in the last decade. Some of DPEP states have utilised the potentials of this medium to a large extent, whereas some of the DPEP states are in the stage of very inception.

Teleconferencing: Advantages

No doubt personal contact is the most powerful mode of training and no other media can replace it, but it cannot be said to be self-sufficient and remedy to all educational problems. In the present age of electronic mode, where information technology has created real possibility of demolishing the administrative structure in favour of horizontal administrative structure with a fewer layers of control. Teleconferencing is one of such modes moving fast into the direction for future mode to supplement SIMs or the personal contact mode. Divergent opinions have been expressed about advantages of teleconferencing and also technical problems in its utilisation. There is a need to study this and analyse in depth to pronounce any judgement about the real utility of teleconferencing mode for delivery of educational packages.

However, some of the advantages of teleconferencing are:

- (i) It is a fast communication medium through which limited resource faculty or the specialists in the field could be approached by masses.
- (ii) There is no transmission loss of knowledge.
- (iii) It is a powerful medium through which a large number of masses could be addressed to/trained or their queries/problems be solved from the distant places in several locations at a time. Quality of interaction is enhanced.
- (iv) It is cheaper if used for large masses.
- (v) It has greater impact on the learners.
- (vi) It can use all kind of technology for the benefit of the learners.

There are multiple channels of learning.

- (vii) It not only projects geographic coverage but also establishes appropriate, relevant, meaningful, supportive, widening relationships built-up through DRS (Down Link Dish Antennas).
- (viii) Exchange of views, sharing of experiences and ideas is possible among distant people.
- (ix) Lessons, panel discussions, conduct of demonstrations, etc. are beamed from a central station (studio) and received at various learning centres from where they can get their doubts clarified through phone/fax or e-mails.
- (x) It has scope of learning through multi varieties of resources.
- (xi) It leads to active learning.

Limitations of Teleconferencing

Though there is no realistic assessment, yet it has been found to be associated with some inherent limitation. Some of these are:

1. It is difficult to use it in multilingual setting.
2. It has limitations of technology like the electricity failure, tract, satellite connectivity, studio difficulties, uplinking facilities, downlinking facilities, maintenance of DRS, etc.
3. Telephone/fax or other lines to be in order (Interactive Programme Modus Operandi).
4. Coordination between studio/panelists and the learning centres (Proper Orientation of Facilitators).
5. Panelist selection, attitude, orientation and presentation (facing the camera) are also important.

6. Cost-benefit of the teleconferencing is again a debatable issue until it is used for the benefit of a large number of learners.
7. It is a powerful media for impact and retention of learning which would be compared to learning by doing.

Organisation of Teleconferencing

Besides the organisational part, teleconferencing involves three major elements of the system configuration which need their linkages. They are the learning centres as receiving ends at one end linked to the teaching end in the studio via the space link, i.e. the space craft.

Receiving Ends

Receiving ends where the participants sit should have downlinking facilities in the form of DR system. There happens to be more than one learning ends in different locations within a state or any part of the country each having DR system installed for receiving the signals. All the receiving ends should be connected to download same frequency if they are to be used for same teleconferencing. They should have enough space to accommodate the participants comfortably. TV sets, telephone and fax facilities within the rooms or reach, generator sets, etc. At a time from the same DR system more than one room/hall could also be used, in case number of participants is more at the same centre.

Space Link

ISRO in India is presently providing the facility of space link on a particular

frequency (as per need and facility) wherein the space segment being used by DEP-DPEP through artificial satellite INSAT-3B via an extended C-Band transponder for the transmission of audio-visual signals on that frequency received from the studio used for teleconferencing.

Delivery End

Delivery end where the panelists sit or the resource faculty is available is normally being taken up as studio with an uplink Transportable Remote Area Communication Terminal (TRACT) in its vicinity. The delivery end should have facilities of multimedia, transmission, recording, displaying, audience and even for a classroom, if needed. It also has a facility of face to face interaction, AV aids, dias for panelist and other sitting arrangements along with uplinking facility of ISRO at the same frequency as at the receiving end. It has telephone lines, fax lines all of which could easily be passed on to panelists instantly. The panelists could respond to queries/questions, make presentations, show recorded materials (audio/video) and use all kinds of technology.

Teleconferencing Design Used

There can be a variety of training designs for using teleconferencing media, i.e. it can be used in a variety of ways using different strategies depending upon the theme, contents, need, clientele, objectives and long-term gains. However, DEP-DPEP has used its own approach in teleconferences. The design used by DEP-DPEP is as given here—

1. Face-to-face training — Learning/Receiving End.
2. Development of training material in SIM (Tele-Material)—Learning End.
3. Self-study of tele-material — Learning End.
4. Listing of difficulties/queries — Learning End.
5. Group Interaction — Learning End.
6. Presentations/Demonstrations by Experts/Panelists (Live/Recorded).
7. Questioning from Learners through telephone/fax — Learning End.
8. Responding to Learners' questions—Teaching End/Transmission End.
9. Sharing of experiences — Teaching End/Learning End.
10. Summing Up — Teaching End/Learning End.
11. Participants' feedback and reactions — Learning End.
12. Consolidation of Reports — Learning End.
13. Learners' Research and Lessons for Future — Teaching End.

In this paper I will like to share experiences of one of the teleconferencing used for interaction with Panchayati Raj Members. The revival of the Panchayati Raj (Local Self-government) institutions through an amendment in the Constitution of India (seventy-third) 1992 endows these grassroot institutions with the strengths and prestige associated with the Self-governance structure. The educationists have realised the importance of such institutions in the last decade, thereby, constituting Village Education Committee (VEC) involving these members at local school level and management of educational systems at

grassroot levels. The involvement of community is well-accepted by all concerned leading to empowerment of MTA, PTAs and VECs at all levels acquiring highest priority. Greater involvement of community for qualitative and quantitative improvement in education system has been stressed by all. With launch of *Sarva Shiksha Abhiyan* (SSA), the Government of India has felt that the Goal of SSA cannot be completed without their active involvement. With an experience of DPEP in one of the biggest states of India, i.e. Uttar Pradesh, State Project DPEP, DEP-DPEP of the IGNOU, felt the need to conscientise the elected representatives of their roles and responsibilities along with the needs.

Issues Discussed

Depending on the needs of the clientele group and experiences of the State Project Officers, administrators, teachers, teacher educators, etc. the following issues were discussed:

- Role and functions of VEC.
- VEC initiatives in Micro Planning and Interventions by *Gram Pradhans* in different areas.
- Strategy to seek community participation.
- Community participation in qualitative enhancement of school education.
- Community involvement in quantitative enhancement of school education and initiative towards decreasing drop-outs.
- Construction Activities and Development Grants.
- Community initiatives in creating healthy and interesting atmosphere in schools.

- Establishment of Book Bank, toys and old clothes, for students.
- Identification of problems faced in seeking community participation.
- Strategies to solve problems.
- Empowerment of community in monitoring and supervision of school education.
- Mass Movement of VEC involvement.

Ensuring Facilities

To ensure the smooth conduct, the slot had to be booked with ISRO on our desired frequency and also the teaching end, i.e. studio. Infrastructure facilities have to be ensured at the teaching end as per the need of the panelists, whereas, the receiving end has to ensure facilities as per their needs like the sitting arrangements, TV, blackboard, fax, STD, generator, etc. There need to be the observers and facilitators also at the learning end and resource faculty, panelists, and the programme coordinator at the teaching end.

Training of the Facilitators, Observers and Panelists

For a successful and a desired impact of teleconferencing, it is necessary to brief the facilitators, observers and panelists about the technical aspects of the teleconferencing, the clientele, the theme, the objectives, etc. so that there is a perfect coordination between different agencies. Facilitators and observers have also to be briefed about tuning of the system, difficulties faced in previous teleconferencing and previous experiences.

Programme Schedule

One-day teleconferencing was scheduled on Friday, 1 November 2002 from 9.30 a.m. to 5.30 p.m. with a lunch break of 40 minutes from 1.00 p.m. to 1.40 p.m. and two tea breaks of 15 minutes each. Thus, out of nearly $7\frac{1}{2}$ hours of teleconferencing nearly 4 hours and 30 minutes were spent on live telecast from teaching end and 3 hours for interaction among the participants at the learning end. Out of the live telecast nearly 3 hours and 30 minutes were used for interaction between the participants at learning centres on one hand and the panelists at the teaching end on the other hand. The highlight of the schedule was a direct face-to-face interaction between the Secretary, MHRD, Government of India, Shri Sumit Bose, IAS from the studio with village *Pradhans* from the learning centres for nearly two hours. The learning end schedule was divided into four sessions as per schedule whereas, the teaching end session (live) was divided into nine sessions. The schedule also contained a demonstration of some experiences through video followed by a discussion on the same. However, OFF AIR time was two hours whereas ON AIR time was nearly 4 hours and 30 minutes. Most of the time was used in productive interaction among teaching and learning ends.

Target Participants: Number and Nature

DPEP Uttar Pradesh had planned the teleconference for

1. Ten members of VEC.
2. Ten Gram *Pradhans*.

3. MTA members, PTA members giving due representation to SC/ST and other minority groups.
4. Joint Directors of all the Districts.
5. Principals and Vice-Principals of all DIETs.
6. BSAs and ABSAs.
7. District Coordinators (Girl Education and Community Participation).
8. Ten Headmasters (five male and five female) in each centre with total participation of 50 per centre.

Thus, the target group at each learning centre included the representatives of the community as (1) to (3) above, Basic *Shiksha Adhikaries*, Additional BSAs, State Project Staff (TTI, EE, IED personnel, etc.) District Project Staff, DIET faculty, teaching community including teachers, principals, headmasters, district coordinators, etc.

Learning Centres

The programme was planned to be received at 36 centres in Uttar Pradesh including two in Lucknow, i.e. SCERT and SIET where DRS have been established and were functioning, installed by State DPEP/DEP-DPEP, New Delhi. Each learning centre was expected to have 50 participants, whereby nearly 1800 participants availed the opportunity. Some of the learning centres accommodated more than one district because of want of DRS or DIET or other infrastructure facility. The centres were widely distributed throughout the state with one centre in between two districts of Uttar Pradesh. Therefore, it could safely be said that the teleconferencing has tried to cover the whole state.

Live Interaction

After inaugural session, the beginning introductory session and sharing of experiences through video clippings, plenty of scope was provided to the participants for live interaction on the issues relating to the themes stated earlier. With phone and fax facilities available at the disposal of the participants 55 telephone calls were received in the studio and 67 fax messages recorded, wherein two-three questions were put from distant learning ends in each phone call or fax message besides 15 *Gram Pradhans* and community members who had come to the studio for direct face-to-face interaction also joined the show. Three phone lines and a fax line were provided at the studio for the purpose. In each call or fax more than one question was asked from the other side. In the end, because of limitation of time, we could not invite questions from some centres and had to express regret to them. They asked the questions ranging from 'illiterate *Pradhans* and importance of education' to 'community involvement vs *Shiksha Mitra*'. They raised the issue of lack of teachers in the state to high-pupil-less teacher ratio at places. The school buildings, teachers involvement in works other than teaching, were also discussed during teleconferencing. Training gap between need and demand of primary teachers was also an issue of debate 'Monitoring and Role of VEC' in construction activities, construction and election of members. Policy decisions on issues of community involvement formed the basis of questions and responses during interaction sessions. Issues of grants and recognition were also raised

from learning end. Health checks, mid-day meals, authority of MTA, meeting of MTA/VEC, relation between authorities and community were also taken up for questioning from learning end. Questions were also raised on irregularities in procurement and distribution of mid-day meals, books, etc. Coordination among different agencies was also discussed and emerged out of teleconferencing. Echoes were also raised for provision of Class IV employees in primary schools.

There was an enthusiastic response from the Learning Centres with *Gram Pradhans*, PTA members and even Administrators putting up their questions and queries on policy issues, working nature and maximising efforts. Panelists responded to most of these questions to the most satisfaction from the studio. Three *Gram Pradhans* who acted as panelists also shared their experiences on community support to primary schools with their counterparts in the state. They even responded to some of the questions. A major issue that emerged out of the discussions, interactions and responses of panelists was that the community can play an important role and support the educational systems by adopting a positive attitude towards school ownership and self-governance. Secretary, Elementary Education and Literacy stressed the need of adopting the schools by the community, wherein *Gram Pradhans* could play an important role, which is in his words, "Community Governance of School Education". Maximum number of calls were made from the SIET and SCERT, Lucknow followed by three calls each from many

centres like Agra, Rai Bareli, Lalitpur, Mainpuri, Jalaun, Sultanpur, Azamgarh, etc. In fax maximum fax messages were received from Jhansi followed by Ghazipur, Mau, Mathura, Bareilly, etc. Maximum number of questions put and responded to Azamgarh followed by Lucknow.

Gram Pradhans also raised the concern on availability of furniture, books for students, boundary walls of schools, freeships and scholarships and their late distribution to schools which were assured to be looked into through concerned authorities. Maximum number of participants 70 were reported at Ghazipur followed by 68 at Mathura. In the end Ms Johra Chatterjee, State Project Director, summed up various issues that emerged out of the conference as a gist of deliberations for the day. The learning centres were expected to send the filled participant profile proforma for each participant, feedback proformas duly filled in and a consolidated report on day's activities at their centre after the teleconferencing.

The analysis of the feedback received from the learning centres through such opinionnaire/reaction scale indicates that the participants took an active interest in the teleconferencing activities and were enthusiastic about various aspects of schooling. Participants have rated the teleconferencing at a very high scale with giving their positive opinion about its impact. They have shown a great interest in its all aspects and were satisfied with presentation and responses except that they demanded more time for their questions. They have pointed towards the limitation of time and lack of individual attention with

many queries went unattended due to time. The participants have been happy to listen to their names/their questions and responses and attitude of the panelists being positive to their concerns. However, they wanted more

time slot for teleconferencing, yet they felt the training to be more beneficial because of the scope provided by it to them to share their field experiences with others. They hoped to have more teleconferences for solving their problems.

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An Evaluation of Total Literacy Campaign of Thiruvallur District¹

P. ADINARAYANA REDDY*

Abstract

The Government of India launched the National Literacy Mission to eradicate illiteracy in the age group of 15-35 years and adopted literacy campaign mode. As a part of the strategy, literacy campaign was launched in all the districts. In order to assess the performance of these districts the districts are being evaluated externally. The present paper deals with the evaluation of the Thiruvallur district (Tamil Nadu) literacy campaign with special reference to the administrative mechanism. Further, it also provides suggestions for need for dissemination of the findings and performance of the district in literacy attainment, strengths and shortcomings of the campaign for changing the policy of evaluation of the literacy programmes.

Key words: National Literacy Mission, Total Literacy Campaign, Neo-literates, Illiterates

During 1996, the Chengalpattu district of Tamil Nadu was bifurcated into two districts. One of the districts formed was MGR district, which was later renamed as Thiruvallur district with Thiruvallur as its headquarters. It is bounded by

Andhra Pradesh in the north, in the east Bay of Bengal, south Kanchipuram and Vellore districts in the west. The district has three revenue divisions Thiruttani, Thiruvallur and Ponneri with eight Taluks, 14 Panchayat Unions, 19 Town

* Assistant Director, Department of Adult and Continuing Education, S.V. University, Tirupati 517 502, Andhra Pradesh.

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Panchayats, 6 Municipal corporations and 539 village Panchayats.

As per 2001 census, the Thiruvallur district has 29,38,866 population, with a sex ratio of 1000 : 970. The district has 69 per cent of literacy before launching the TLC programme in the district.

Total Literacy Campaign

The Total Literacy Campaign of Thiruvallur district was formally launched on 26 January 1995. In order to build up the environment, the district has organised a number of environment building activities such as, cycle rallies, etc. In the second stage, one-day door-to-door survey was conducted in the district to identify and mobilise the target group, in the age group of 15-35 years on 10 January 1995 and 1 March 1996 in Thiruttani, Thiruvallur divisions and Ponneri divisions, respectively. The one-day survey identified 3,61,671 non-literate in the age group of 15-35 years.

Administrative Structure

The total literacy campaign of Thiruvallur district was headed by the District Collector as President, assisted by Vice-President (Sub-Collector, Thiruttani Division), Assistant Project Officer (DRDA) as the secretary and personal assistant to Collector (Accounts) as the Treasurer. In order to provide academic and administrative support, the total literacy campaign of Thiruvallur constituted two committees viz, Executive Committee and Academic Committee. The Executive Committee had nine Government Officials, five TLC central staff, two university faculty

members, two representatives of NGOs and one representative from the banking sector (Indian Bank). The Assistant Project Officer (DRDA) was Secretary and PA to Collector (Accounts) was member-cum-Treasurer of the Executive Committee.

The Academic Committee was constituted with 18 members and consisted of 14 Government Officials and 4 TLC central staff of Thiruvallur district. The academic committee looked after the functions like training, material preparation, monitoring, etc.

Environment Building

In order to create a suitable environment for launching the TLC, the administration identified 42 cultural troops consisting of 614 artists. All the selected troops were provided training ranging from 10 to 20 days. The troops visited Thiruttani and Thiruvallur divisions from February 1995 to August 1995 and Ponneri division during October 1995 and February 1996. In addition, the TLC of Thiruvallur had undertaken a host of activities like *Arivoli Padayatra*, *Song Jathas*, cycle campaign, Polio drive, photography to make election identify cards, World Women Day celebrations, bonded labour survey, eye camp, lamp lighting campaign, forming of human chain, learners conferences, dramas and role plays, wall writing campaigns, etc.

Further, posters, pamphlets, hoardings, wall writings, Arivoli-stickers, Arivoli-stencils, Arivoli-year diary and special bulletins "Arivoli Jagam" and "Malligai" have been extensively used. No doubt the process of creating environment with various activities

resulted in the successful mobilisation of the target group.

The Environment Building activity was continuous process in the district and various activities were organised in one part or the part of the district throughout the TLC period. Important events were celebrated. *Kala Jathas* were organised. For instance, in the month of July 2000, 360 programmes were organised and one lakh population was covered. In the month of November 2000, 6,000 leaders were involved to conduct a re-survey and environment/awareness creation activities. All these activities sustained to tempo of the TLC. The TLC programme of Thiruvallur was organised for 5 years from 1995 to 1999 and post literacy was launched during August 2000.

Teaching-Learning Materials

A syllabus committee was constituted for the purpose of designing the teaching-learning, as per the IPCL norms. The committee met thrice, i.e. on 25 August 1995, 1 January 1996 and 2 February 1997 and prepared primers I, II, III, respectively, and got the approval of the State Resource Centre. The point to be noted here is that the campaign was launched on January 1995, but the actual teaching was launched on 2 October 1995. The first two primers might have reached the target in time but not the third.

Training

The campaign authority has adopted a three-tier training system for providing training to the functionaries at various levels. During the first phase, the key resource persons and block programme

coordinators were trained. In the second phase. Assistant Project Coordinators, resource persons and master trainees were trained. During the final phase of training, the volunteer instructors were trained. In addition to the above, the master trainers, village ward contact persons were also trained. Further 5000 volunteer instructors were trained for organising post-literacy activities and in the use of PLI. The representatives of NGOs and other development agencies were also given orientation about the campaign.

Teaching Phase

Though the total literacy programme was launched on 26 January 1995, the teaching process was initiated only in November 1995. Actually, teaching of Primer I started on 20 November 1995 and 22 July 1996, in Thiruvallur, Thiruttani divisions and Ponneri divisions, respectively. The teaching of Primer II started on 30 July 1996 and 6 November 1997 in Thiruvallur divisions and Ponneri divisions, respectively. Primer III was introduced in the month of June 1999. The post-literacy campaign was launched on 20 June 2000 for the benefit of neo-literates. The pace of implementation of TLC: was not uniform in the two divisions, viz Thiruttani and Thiruvallur divisions advanced fast, the Ponneri division was slow to catch up. The Primer III was introduced in all the divisions simultaneously.

Extension of Total Literacy Campaign

The TLC of Thiruvallur part of erstwhile Chengalpat MGR district was launched

on 26 January 1995 and TLC as per the plan and should have completed by January 1996. However due to reorganisation of the district the district administration requested the Government of India for extension. The NLM accorded permission thrice for the extension of the TLC, i.e. first time up to October 1996, second time up to April 1997 and third time up to 1998.

Allocation and Release of Grants

After the approval of TLC the Government of India and Tamil Nadu Government allocated 3 crore and 1.3 crore respectively and the Government of India and Tamil Nadu Government released 2.5 and 1.6 crore respectively. However the money was not released in time as a result the planned programme activities were disrupted and the programme was stretched for a longer period.

Concurrent Evaluation

The concurrent evaluation of TLC was taken up to identify the strengths and weaknesses, to provide suitable suggestions for effective implementation of TLC. The data was gathered both from the primary source viz., the target functionaries, administration etc., and the secondary data was collected from the Collectorate and Central Office of Arivoli Lyakkam. The findings of the evaluation revealed that the TLC Thiruvallur has suitable administrative and organisational structure. Out of 3,61,671 learners, 3,24,626 were enrolled. Training was organised for voluntary instructors for a period of 30 days. The resource materials used in the training programme was of poor quality

and use of teaching-learning any AV aids were inadequate. The maintenance of records, submission of reports, periodical evaluation was far from satisfactory. The organisation of centres were very poor and the performance of the learners was below average. The supplied teaching-learning materials was inadequate and also not in time. The shortage of grants reflected the quality of the programme.

Evaluation of Total Literacy Campaign

Methodology

Sample of the Study

As per NLM norm, 5 per cent of the enrolment or 10,000 learners have to be taken as the sample for external evaluation. The enrolment in the district was 3.61 lakh and the current learners, i.e. learners who have completed Primer II were only 2.50 lakh. Hence, it was decided to take 10,000 sample learners for the study. In the first phase of the sample selection, all Panchayat union or block were selected. In the second stage from each block, two Panchayats were selected randomly. On an average, there were 3 habitations in each Panchayat, 28 Gram Panchayats were selected randomly from 14 blocks. All the P-III learners in these villages were selected for administering the literacy test. In these 14 blocks, the target was 13,823 and number of current learners of these blocks consisted of 11,104 learners.

Tool

An achievement test to measure the level of literacy possessed by the target was designed based on the NLM guidelines

and Dave Committee report on evaluation of learning outcomes. The test contained three sub-tests. A sub-test each on reading for 40 marks, writing 40 marks, and arithmetic for 20 marks was designed. The total marks of the test was 100. While constructing the test the content of the primers used in the campaign was kept in view. Only one set of test paper was prepared and administered throughout the district to maintain the uniformity.

Administration of the Tool

In order to administer the literacy test to the learners, 60 test administrators were selected and trained for a day. During the training programme all the aspects relating to the test and sample were explained to them with demonstration. All the trained test administrators administered the test to the current learners simultaneously in all the three revenue divisions under the supervision of team leaders. In all the three divisions, out of 11,104 current learners 9,412 learners had appeared for the test. The test papers were corrected and marks awarded. Based on the NLM criteria, 50 per cent in each component and 70 marks in aggregate, was adopted for arriving at the attainment at literacy of the learners.

Identification of Proxy and Genuine Learners

Every effort was made to identify the genuine learners while administering the test. Candidates from outside the campaign persuaded to leave the place without disturbing the evaluation process. The test administrators were

also informed about the method of handling these people. In spite of all the efforts, out of those appeared for the test, 850 fake learner scripts were identified as proxy and not considered for evaluation. Hence, out of 9,412 learners 8,562 learners were considered as genuine learners for the current evaluation.

Findings of the Evaluation

- The TLC of Thiruvallur District has identified 3,61,671 illiterates through a one-day survey and enrolled 2,50,530 learners. According to NLM norm a learner who scored an aggregate of 70 marks and 50 per cent in all components of literacy, viz. reading, writing and arithmetic, is considered to have attained literacy norm. Out of 8,562 genuine learners, 3,996 learners attained literacy norm. The percentage of learners who attained literacy was found to be 46.67.
- Division-wise performance of learners shows that, Thiruvallur division has achieved 70.12 per cent of literacy followed by Ponneri division with 49.76 per cent of literacy and Thiruttani division with 19.98 per cent of literacy.
- Block-wise performance shows that Poondi block of Thiruvallur district has attained 87.32 per cent of literacy followed by Ellapuram 83.05 per cent and Poonmalai (77.80%) and urban Panchayat. Gummidipoondi block of Ponneri division has attained 71.02 per cent literacy. The performance of block R.K. pet and Pallipatti in Thiruttani

division was abysmal with only 11 per cent of literacy.

- Panchayat-wise literacy attainment shows that among Ponneri division Enathinelpakkam Panchayat of Gummidipandi block has attained 70.24 per cent of literacy whereas Thadur Panchayat in Thiruttani division has attained 49.42 per cent of literacy. Thirupatchor Panchayat of Thiruvallur division has attained 89.17 per cent of literacy and this is the Panchayat which has attained maximum literacy among all the Panchayats in the district.
- Component-wise achievement of learners shows that 68.94 per cent of learners have attained the minimum norm in reading, 86.69 per cent in writing and 88.15 per cent in arithmetic.
- Sex-wise attainment shows that the women have attained more success rate than their counterparts in all three components, viz. reading (71.12%), writing (87.95%) and arithmetic (88.59%), while men have attained only 63.61 per cent in reading, 83.28 per cent in writing and 86.95 per cent in arithmetic.
- The range of marks attained by the learners shows that 14.37 per cent of learners could not secure 50 per cent of marks. Around 50 per cent of learners secured 70 per cent and above marks. The remaining sample stood in between these two ranges (16.54% attained 50-59% marks and 19.97% attained 60-69% marks).
- The overall performance of learners in terms of sex revealed that out of 2,315 men only 953 (41.17%) have attained the literacy norm, whereas, women have attained 48.71% of literacy, i.e. out of 6,247 women learners, 3,043 women learners have attained the literacy.
- The caste-wise performance of the learners shows that SC/ST group has attained 52.13 per cent followed by backward caste group (32.90%) and forward caste group (25.75%).
- The age-wise performance of the learners shows that learners with 15 years and less (N = 24) have secured 54.16 per cent. In case of learners with 15-35 years, 44.25 per cent and those with 36 and above have attained 53.92 per cent of literacy norm.
- The target of the present study was 13,823 learners. Out of them, the current learners were 11,104 and out of this only 9,412 appeared for the test. Among them 850 were found to be proxy learners. Out of this 4,589 learners are found to have attained NLM norm. Hence, the success rate comes to 41.33 per cent. The success rate when applied to the district, it is estimated that 2.63 per cent were made literate.
- In view of the above the mapping-up programme should be taken up for a target of 2,58,127 illiterates/semi-literates and post-literacy programme for 1,46,986 neo-literates.

Strengths of the Programme

- The leadership provided by the district authority in generating enthusiasm and in retaining the

tempo for a five-year period is worth mentioning. The credit goes to the District Central Team.

- The monitoring of the programme was found to be very effective.
- The environment building activity through cultural Jathas were found to be effective in mobilising the target group in specific areas.
- People's representation at various stages and levels of programme has helped in motivating the target population to participate in the programme. The NGOs and religious heads played a significant role in encouraging the people to participate in the programme, especially the women.

Shortcomings

- The bifurcation and re-organisation of the district has affected the programme.
- The programme was not organised uniformly throughout the district.
- The quality of the training programme for the field functionary was found to be less effective in terms of duration and coverage.
- The duration of TLC was long drawn spreading over a period of five years.
- There was no proper follow-up and many neo-literates relapsed into illiteracy.
- The programme could not penetrate into masses due to lack of effective propaganda and media support.
- Major problems of the programme was that the release of fund was delayed both by the State and Central Governments.

- The programme was almost a non-starter in Municipal Corporations.

Recommendations

- The district should conduct the re-survey to identify the illiterates and semi-literates.
- The environment building activities may be taken up for rejuvenating the programme.
- The functionaries at various levels should be re-oriented keeping in view of the existing conditions of the district.
- The volunteers should be trained for about five days. The content of the training should reflect their roles, contents of learning materials, teaching methodology, creation of educative environment, etc.
- The teaching-learning materials may be re-designed keeping in view the needs and local conditions.
- The mopping-up of the programme (100 days) may be taken up immediately for the semi-literates and drop-outs.
- Post-literacy and continuing education programmes may be taken up for the neo-literates to prevent them to relapse into illiteracy.
- As special drive may be taken up in the urban areas/municipalities to cover the illiterates.
- For effective monitoring of the programme, a team of Task Force Officers may be constituted by drawing the officers from Education, DRDA, Women and Child Welfare and they may be

allocated different blocks for monitoring. The District Collector should review the performance of the programme at least once in a month.

- The Non-Government Organisations functioning in the district should be involved in a big way in all phases of programme starting from survey to follow-up of the programme by allocating the areas.
- A meeting with Associations of Teachers, Trade Union Leaders, representatives of political parties may be organised at district level separately and they may be requested to participate in the programme by educating their cadres or the educated cadre in the training of functionaries and in monitoring of the programme.

Suggestions for the Improvement of the Evaluation Policy

The present evaluation policy of total literacy campaigns is aimed at finding out the attainment of the literacy rate among the participants. The evaluation of TLCs was commenced after a long gap of one-to-two years. As a result of the long gap, it is likely that the neo-literates of TLC may be relapsed into illiteracy. Further, the TLC districts, after receipt of the panel of evaluation agencies, are taking their own time in finalising the agency for conducting the evaluation. The suggested procedure of sample size by the NLM is also too large to manage. The achievement test suggested by the NLM is aimed at evaluating the literacy skills only and no provision was made for identifying the awareness (or) knowledge gained by the participants.

In view of this, it is suggested that:

- The NLM after receipt of the report from the district should nominate a agency and advise the agency as well as the district authorities to follow mutually agreed time-frame for completion of the study. The agency nominated for evaluation should be given a 10 to 15 days of time for accepting the offer. If no reply was received alternative agency may be asked to take up the work. This will reduce the time gap.
- The TLC districts should provide all the details of the campaign within a period of 10 days after the receipt of acceptance letter from the agency and the agreement should also be signed. The first instalment of grant should be released immediately.
- The evaluating agency should take measures to complete the evaluation work within stipulated time and submit the report to the NLM. The agency should complete the reporting within a month of completion of the data collection.
- The literacy has the capacity to bring changes, may be of immediate and long duration among the individuals. Hence, the evaluation should also take the above in view and to see whether such changes have occurred, if yes, to what extent and on what aspects. This has to be done by choosing a small sample with intensive drilling.
- The NLM should communicate the findings to the concerned districts and ensure the steps taken to rectify the deficiencies, if any, and to bring the campaign into the track.

- The NLM has already identified more than 100 agencies and empanelled them for evaluation. Hence, no agency should be given more than 3 or 4 districts. All the agencies should be involved without any bias.

Suggestions for Dissemination of Evaluation Findings

- The findings of the evaluation should be disseminated not only in the concerned TLC district but also the TLCs of similar grade so as to identify the possible shortcomings in their own districts.
- The orientation programme or refresher programmes for the empanelled agencies should be conducted at least twice in a year to share their findings with the other agencies and highlights of the latest information of the evaluation.

- The evaluation of TLC as on date is restricted mostly to the literacy attainments and percentage of literacy attained by the districts. In order to have a comprehensive evaluation of the districts all the inputs and outputs of the campaign should be considered for arriving at cause and consequences.
- The NLM should have a panel of academics in all the four regions of the country and this panel should meet at least twice in a year to analyse the adult education programmes in that region and to suggest the Government for taking suitable measures.
- The NLM should also sponsor follow-up studies in specific areas such as training, environment building, material development, components of awareness, impact of literacy on social development, etc.

Integrated Education for Children with Disabilities¹

BHUSHAN PUNANI*

Abstract

Unparallel growth of integrated education as well as residential education in Gujarat establishes that it is possible to promote all the mode of education as complimentary to each other. It establishes that a coordinated approach that involves Government, educational organisations, NGOs and support system with appropriate utilisation of existing schemes can achieve all the targets set by the Biwako Millennium Framework. In reality, a variety of initiatives on promotion of education for all have enhanced neither quantitative nor qualitative coverage of children with disabilities. The existing approaches, projects and schemes in the existing form and extent of implementation can never succeed in achieving targets set by the Framework. Notwithstanding negligible coverage, even the quality of education being imparted to children needs to be improved significantly. Merely adoption of Framework, by itself, may not ensure appropriate education to each and every child with disability. It would require establishing a system for monitoring of progress, allocation of adequate resources, adoption of the policy by different stakeholders and different state machineries, promoting educational approaches under the auspices of education system.

Key words: Integrated education, Biwako Millennium Framework, Education For All, inclusion, social communication, community participation

A Case Study

The first systematic and documented attempt for enrolling children with

disabilities in the regular schools in Gujarat was made at Palanpur during 1963. A leading educational institute,

* Executive Director, Blind People's Association, Vastrapur, Ahmedabad 380 015.

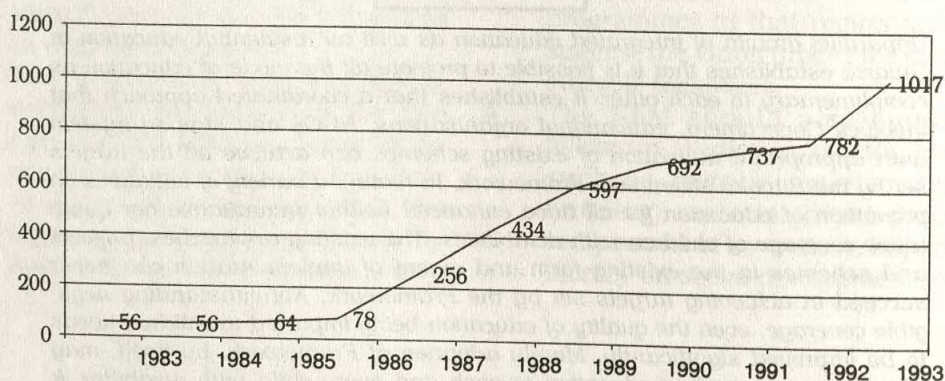
¹ Based on the paper presented by the author at National Consultations on the Biwako Millennium Framework for Action organised by the Ministry of Social Justice and Empowerment, New Delhi.

Shishu Vidyamandir opened up its gates to admit children with special educational needs in the school and also provided hostel accommodation. This experiment on partial integration grew steadily, and now has more than 100 such boys and girls.

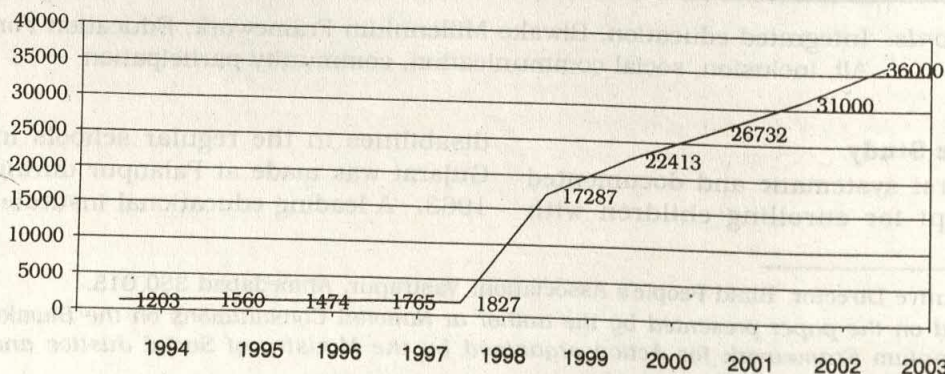
A true beginning of integrated education in Gujarat was made during 1981 with 11 children only, with the

support of an International Funding Organisation. The Government of India provided support to this initiative during 1986 by sanctioning a grant of Rs 65,000 for 8 children with visual impairment covered under integrated education. Today, after 17 years, this small number has increased by 4500 times with a grant allocation of Rs 105 million!

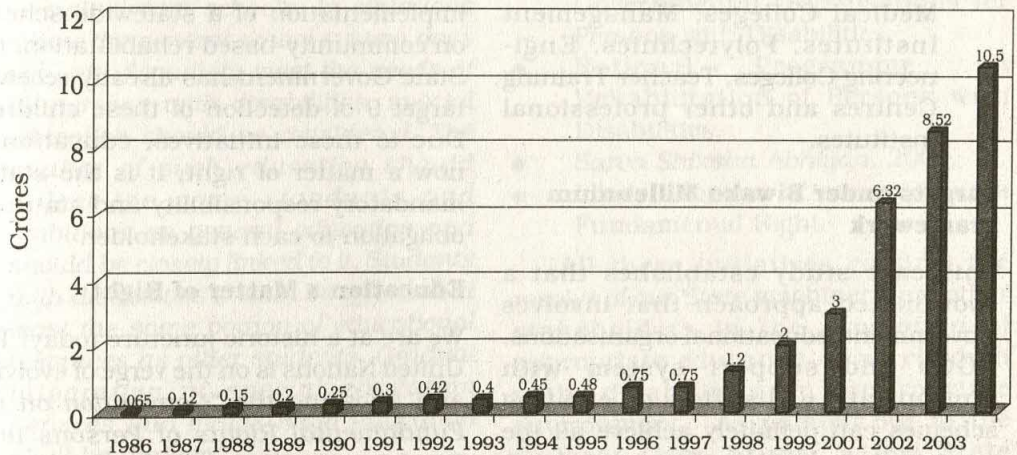
Enrolment - I Decade



Enrolment - II Decade



Grant Sanctioned Under Scheme of Integrate Education



Today in Gujarat, there are more than 36,000 children studying under integrated education, completely supported by the Ministry of Human Resource Development as well as the Department of Education. The coverage has increased from only visually impaired children to children from all categories of disability.

To support this concept further, the Department of Social Justice and Empowerment, Government of Gujarat has launched a statewide scheme of Community Based Rehabilitation (CBR) with the target of covering each and every person with disability by the year 2008. This mega expansion of the concept of integrated education and CBR establishes the following facts:

- Implementation and expansion of integrated education has helped residential education to grow due to better survey and non-availability of regular educational

activities in the area. These residential schools have now transformed themselves into Resource Centres for the integrated education projects. The Scheme of Integrated Education is implemented by the local NGOs under the support, guidance and monitoring of Gujarat Council of Educational Research and Training, an autonomous body under the Department of Primary Education, Government of Gujarat.

- The combined approach of promoting all modes of education simultaneously has enabled the State Government to ensure *Education For All*. It has resulted into production and distribution of large-scale assistive devices under the ADIP Scheme of the Ministry of Social Justice and Empowerment. A large number of students with disabilities are now aware of their

rights and the provisions of the Persons with Disabilities Act. They are now seeking admission to Medical Colleges, Management Institutes, Polytechnics, Engineering Colleges, Teacher Training Centres and other professional institutes.

Targets under Biwako Millennium Framework

This case study establishes that a coordinated approach that involves Government, educational organisations, NGOs and support system with appropriate utilisation of existing schemes can definitely achieve all the targets set by the framework. A convergence of the different Government departments, school administration, active NGOs has ensured that it is on the verge of achieving integration of all the school-age children with disabilities. Similarly, if this trend continues, every school-age child with disability will find a place in an appropriate mode of education.

Existing CBR programmes and other centrally sponsored community intervention projects are likely to result into detection of childhood disabilities, early intervention, integration and appropriate education of each child. In this way, Gujarat would definitely achieve target 6 in terms of ensuring primary schooling for all boys and girls by 2015; target 7 of completion of primary education by at least 75 per cent of children; target 8 of access by all young children to and receive community-based early intervention services by 2012; and target 9 of Governments ensuring detection of

childhood disabilities at a very early age as set by the Framework within the designated time-frame. In fact, with the implementation of a statewide scheme on community-based rehabilitation, the State Government has already received target 9 of detection of these children. Due to these initiatives, education is now a matter of right; it is the state's mandatory responsibility and statutory obligation to each stakeholder.

Education a Matter of Right

We are at a historic juncture today! The United Nations is on the verge of evolving and adopting the "*Convention on the Fundamental Rights of Persons with Disabilities*". The guiding principle for this convention is that human rights are universal and according to their nature thus include all human beings, among them persons with disabilities. All people, disabled and non-disabled, are born equal and have the same inalienable rights to life and development, education and work, and the right to self-determination, independent living, self-representation, inclusion and access to active participation as equal citizens in all aspects of society and community life.

The envisaged Convention devotes one Article on clarifying international opinion on education in the following terms:

"The persons with disabilities have the same right to education as all other citizens. The States shall offer equal primary, secondary and tertiary educational opportunities for children, youth and adults with disabilities in integrated settings. Deaf persons,

blind and deaf/blind have a right to decline education in integrated settings and choose schools for such persons or special classes and units in mainstream schools. In situations where the general school system does not yet adequately meet the needs of all persons with disabilities, special education should be considered. The quality of such education should reflect the same standards and ambitions as general education and should be closely linked to it. Students with disabilities should be afforded at least the same portion of educational resources as other students. Gradual integration of special education services into mainstream education shall be the aim".

Our country at present is pursuing the same approach of encouraging integrated or inclusive education wherever possible and retaining residential institutions for the children who need the same due to nature of their disability and such other factors. Various initiatives taken in India during the recent years establish that our efforts are very much in consonance with the principles, policy as well as priority areas enunciated in the U.N. Human Rights Convention, Biwako Framework and such declarations.

These initiatives include:

- District Primary Education Programme, 1995.
- Persons with Disabilities Act, 1995.
- Scheme of Assistance to Non-Governmental Organisations for Persons with Disabilities.
- National Programme on Rehabilitation of Persons with Disabilities.
- Sarva Shiksha Abhiyan, 2000.
- Likely adoption of education as a Fundamental Right.

All these initiatives confirm the resolve of our State machinery and other stakeholders in the promotion of appropriate education of all children with disabilities in appropriate environment. As pointed out in the Gujarat Case Study, a few State Governments and many NGOs have made adequate progress in respect of achieving the targets set by the Biwako Framework.

Adoption of Biwako Framework

The present document sets out a draft regional framework for action that provides regional policy recommendations for action by Governments in the region and concerned stakeholders to achieve an inclusive, barrier-free and rights-based society for persons with disabilities in the new decade, 2003-2012. The regional framework for action identifies seven areas for priority action in the new decade. Each priority area contains critical issues, targets and the action required. In fact, most of the areas identified in the framework are in consonance with the policy being pursued in India. Our country should take lead in adopting the framework as

a policy document for its implementation within envisaged time-frame.

Missing Links

All the above-mentioned and many other innovative approaches have enhanced neither quantitative nor qualitative coverage of children with disabilities. Despite enactment of PWD Act, introduction of *Sarva Shiksha Abhiyan* and implementation of a variety of projects, coverage of such children is hardly 10 per cent. Despite international mandates declaring that education is a basic right for all children and our country considering "Education—A Fundamental Right," their enrolment is so low. The existing approaches, projects and schemes in the existing form and extent of implementation can never succeed in achieving targets set by the Framework of other Declarations. Notwithstanding negligible coverage, even the quality of education being imparted to children needs to be improved significantly. Some of the critical issues pointed out in the Framework need to be debated to determine the possibility of adopting the same into our educational system to fulfil its various aspirations.

Early Intervention

To ensure enrolment of children with disabilities in appropriate educational programmes, it is essential to provide early intervention services, including early detection and identification. To make the identification result-oriented and cost effective, provision has to be made to provide training to parents and families to facilitate the maximum

development of the full potential of their disabled children. As pointed out in the Framework, these services need active participation and involvement of Departments of Health, Child Development, and Social Services apart from the Department of Education.

Inclusion

Let us not always debate as to what mode of education is more effective, relevant and appropriate. The parents and children with disabilities must have the option of choosing appropriate mode of education. The Gujarat Study establishes that all modes of education can co-exist, complement each other and ensure provision of appropriate environment to each and every child with disability.

As envisaged in the Framework, it is essential to promote inclusive education wherever possible for such children. The country has already taken initiatives in this regard. The only way to expand coverage and to enhance quality of intervention is to consider "Education of a disabled child" as education *per se* and the same to be covered under the auspices of regular education. The decadent concept of promoting special education as a special scheme or a project or a programme has not yielded the desired results. Similarly, the age-old tradition of considering "Education of the disabled" as a welfare activity must be revamped. The Ministry of Human Resource Development as well as Departments of Education at State Government level must rise to the occasion and cover such education under its regular education system with the provision for support of Special

Educators as is being done under the integrated education.

Support System

Just by making a pro-rata allocation of resources as done in the case of *Sarva Shiksha Abhiyan* or including disability as a component in the programme document as done in the case of DPEP would never ensure inclusion of each child with disability. It is essential to recognise the fact that the children with disabilities definitely have specific needs depending upon the extent and nature of disability, hence a compensatory mechanism or comprehensive package of appropriate support services is essential.

As envisaged in the Framework, it should be mandatory to develop a variety of services in respect of adequate and appropriate teacher training, particularly training of all regular teachers to teach children with diverse abilities, inflexible curriculum and assessment procedures, adequate specialist support staff to assist teachers of special and regular classes, provision of appropriate teaching equipment and devices, and ensuring modifications to the school environment to make it fully accessible. These barriers should be overcome through policy, planning, implementation of strategies and allocation of resources to include children and youth with disabilities in all national health and education development initiatives available to non-disabled children and youth.

Social Communication

While the Biwako Framework has listed all the areas of priority to be pursued by

the National Government it has not focussed upon the need for changing attitude of stakeholders, education managers, parents and public, by and large. In fact, the biggest impediment for promoting appropriate education is attitude of people towards the people with disabilities and lack of awareness about the potential of such persons and statutory provision in this respect. The major areas of thrust in our National Policy, apart from priorities listed in the Framework, should be launching a campaign on promoting effective and appropriate social communication of all those concerned with promotion of appropriate education of special needs children. This component should be in-built component of all the programmes aimed at promotion of appropriate education.

Community's Participation

In a country like ours where the existing coverage of children with disabilities is very low, due to resource constraints it is never going to be possible to establish special institutions. State is at the verge of declaring education a fundamental right, it is essential to promote such model where community and special parents are active participants. The initiative of Rehabilitation Council of India on providing short-term orientation to parents under distant mode is a step in the right direction. While the inclusive education has a scope for parents' participation, even the institutional programmes should also incorporate this component in service delivery.

Let us think of vast opportunities within the community, tremendous

resources within the system, great potentials of stakeholders themselves and wealth of knowledge and experience of professional educators and voluntary workers in the field. A large proportion of existing infrastructure, establishment, resources and knowledge remain either under-utilised or wrongly utilised. Let us shift the focus from individual to community; from just education to complete development; and from special programmes to inclusive approach as envisaged in the Framework.

New Outlook

The policy must ensure that all the concepts, models and approaches to education which are outdated, irrelevant and ineffective; all equipment and assistive devices which are non-functional, beyond repairs and never result into income generation or employment on completion of education must be discarded. Unless all these outmoded, outdated and irrelevant system and equipment are disposed of, there would be no scope for improving quality of our education, enhance coverage and making our efforts result-oriented. Similarly, all service providers, educators or professionals who have not improved their skills and providing education and support services that are no more relevant must be compelled to undertake appropriate training to enhance their skills and capabilities.

The concepts of continuing rehabilitation education, refresher training, and orientation programmes of the educators must find place in our envisaged policy.

Conclusion

The Biwako Millennium Framework, specially priority areas concerning early detection, early intervention and education, must be adopted as a Policy Document as it is along with the above-mentioned six modifications in respect of: comprehensive approach to early intervention, inclusion at levels of education, retaining residential education where essential, adequate support system, promotion of social communication as a mandatory component, ensuring community participation and use of community resources, and revamping the existing machinery to provide scope for adoption of new approaches.

However, merely adoption of Framework, by itself, may not ensure appropriate education to each and every child with disability. It would require establishing a system for monitoring of progress, allocation of adequate resources, adoption of the policy by different stakeholders and different State machineries, promoting educational approaches under the auspices of education system, and above all, considering education—a matter of human right, a fundamental right.

Perception of Pupil Teachers about Predominant Cultural Issues, Strategies about Teaching and Values

GIRIJESH KUMAR*

JYOTI BHATIA**

Abstract

This paper addresses the pertinent question of predominant cultural issues, strategies about teaching and values as perceived by prospective teachers. Besides listing the culture issues that are predominant, the paper presents the strategies about teaching and values of the teacher trainees. It concludes that value teaching is best accomplished in an open and balanced way and approached through an integrated curriculum not only in teacher education but also in school curriculum.

Key words: Predominant cultural issues, Value education, Teaching strategies

A day seldom passes without some news on TV or radio or an article in popular daily newspaper or a leader mentioning, in the same breath, education and values. The story is usually one illustrating some real or imagined shortcomings in schools, pupils and their teachers, arising from or leading to less than desirable behaviour on a moral, social or personal front. In media reports, standard of personal and community

behaviour are demonstrated to have fallen and reasons and responsibilities are sought and identified. Media headlines in various places may be similar, even though the underlying causes identified may be different; as will be suggested remedies. The responsibility of schools and colleges is acknowledged to be present in all societies and educational institutions are traditionally seen as a tool in alleviating

* Head & Dean, Faculty of Education and Allied Sciences, MJP Rohilkhand University, Bareilly.

** Lecturer, Faculty of Education and Allied Sciences, MJP Rohilkhand University, Bareilly.

social problems. With the rise of multinational companies and internationalisation of objects of social, economic and political life, it is the system of values which informs such a process of internalisation that requires examination, critique and explanation.

With the advent of the communication revolution, mass media, the information super highways and the whole set of social aspirations associated with these phenomenal changes, morality has undergone a big change. (Singh, 1999). Character training and value education have been ignored altogether in our present educational system. As a consequence, there has been gradual erosion of values and widespread corruption in all walks of life. The erosion of values is causing havoc in our society. In view of the present scenario, there is an urgent need to inculcate values among students studying at different levels (Ambasht and Singh, 2001). The need is to have persons who are able to provide the stimulus and encouragement to develop the values in students and such important responsibilities can be borne only by teachers.

Teachers own broad context of values, culture, initiative for using their own internalised skill, their personality and their attitude, all these put immense influence for value inculcation in students. *A Teacher is What His Education Has Been*, so it is essential that teacher education at preparatory level should focus on developing moral, national and ethical values. The concept of education should be value-based and it must be taught specially to teachers at the time of preservice training

(Biswal and Das, 1996). The report of the Parliamentary Standing Committee on Human Resource Development (1999) also laid stress on the universal human values of *Truth, Righteous Conduct, Peace, Love and Non-violence* which can serve as the foundation stone for value-based educational programmes representing the five domains of personality—intellectual, physical, emotional, psychological and spiritual and also correlated with five major objectives of education namely, knowledge, skill, balance, vision and identity. *The National Curriculum Framework for School Education* (NCERT, 2000) has also reaffirmed the importance of these five universal human values. Kidder (2000) asked a small group to narrow the 75 values down to five values and found the top scoring values which emerged were: *Honesty, Respect, Equality, Compassion and Acceptance*. The web page featuring a moral barometer of 16 moral values resulted *Honesty* as the topmost voted value, with respect and responsibility ranking close together followed by *Compassion* and then *Justice*. Keshwal (2003) also emphasised on the need of training programme to prepare teacher-trainees to inculcate desirable values among students.

The research findings indicate the need for the identification of the personal and professional value pattern of effective teacher-trainees. The appropriate pattern of curriculum, deviation of appropriate strategies to inculcate the relevant, social, ethical and national values can only prepare teacher-trainees to meet the challenges of value crises among younger generation.

Methodology

An exploratory study was conducted in Rohilkhand Division, Bareilly surveying teacher-trainees in the faculty of Education & Allied Sciences of Mahatma Jyotiba Phule Rohilkhand University, Bareilly on the perception of the teacher-trainees in the areas of values; their perception of problems which they anticipated in relation to attitudes and values in classroom situation; their views on approach which teachers would adopt; and their views on preparation in the field of values provided by their teacher education course. The would be teachers taking part in the study also see the situation *vis-a-vis* the position of schools and values education to be a matter of concern for their continuing or future careers. The study is an attempt to find out the answer of the following questions: How values can be inculcated in students? Which type of value-pattern teacher-trainees should have? Which values are most preferred by would-be teachers? Are values to be taught or caught? Which type of appropriate educational action will be helpful for the cultivation and formation of righteous attitude and values? How school curriculum, teacher-education curriculum, formal and informal teaching strategies contribute in such type of development?

What are the most prominent values which should be taught in the classroom? Which cultural issues related to values should be taken into account when deciding upon the content of school curricula? Which approaches and teaching strategies should be adopted by

teachers for value development? Which components of values should be included in teacher education course?

The sample for the present study was drawn from the campus of Mahatma Jyotiba Phule Rohilkhand University, Bareilly. Teacher trainees who were admitted to B.Ed. (Specialisations) through a written examination comprising general knowledge, teaching aptitude and content related to arts, science and commerce during the session 2002-2003 were selected for the study. The total sample consists of 202 male and female trainees out of whom most of them have post-graduate degree and a few of them were graduate only. Out of the total sample, 63% were science students and only 7% had commerce degree while others belonged to art stream. The mean age of the would-be teachers was 21.66 years at the time of testing. Most of the teacher trainees belonged to the middle or lower middle class as far as social and economic status is concerned. Some of the teacher trainees belonged to other states as there is a provision of 5% seats from other states.

Psychometric Instrument

Value preferences have been measured with the "Value Questionnaire" developed by Kumar (2002). The questionnaire provided a means to examine principles upon which teacher-trainees should base their teaching of values; classroom strategies they employed; cultural issues which trainees perceived as influencing the values dimension of curriculum; and would-be teachers' perception of the most important elements in value

education in schools and in teacher education. The questionnaire was supported by interviews and some instances (approximately thirty) and by observation of others.

The questionnaire for the final stage of the study explored six topics, in open-ended format, but asking for set numbers of responses. The responses sought were:

- (i) The teacher trainees were asked to list down three essential responses from the given list in which the respondent made decision with regard to the teaching and development of values in the curriculum programme;
- (ii) Teacher trainees were also asked to list down the four classroom strategies (formal and informal) which the respondent employed in the area of value development and teaching within the classroom context;
- (iii) Thirdly, they were asked to list five predominant cultural issues which the respondent perceived to exert

major influence upon the values dimension of curriculum;

- (iv) Lastly, teacher trainees were asked to list five most important elements which should emphasise for value teaching in schools and as the components of values in teacher education courses.

Results and Discussion

'Value questionnaire' was administered on teacher trainees and responses were scored and analysed for each task namely, which values should be developed through curriculum; list down the four classroom teaching strategies (formal and informal); list five predominant cultural issues which the respondent perceived to exert major influence upon the value dimension of curriculum and lastly, they were asked to list down five most important elements which should emphasise value teaching in schools and as the components of values in teacher education courses.

To answer the first research question, "which are the five most

TABLE 1
Five most Prominent Values which should be Taught in the Classroom as determined by Futuristic Teachers (N = 200)

Values	Rank	Frequency	%
Respect for all	1	172	86%
Honesty	2	155	77.5%
Equality	3	133	66.5%
Morality	4	120	60%
Responsibility	5	111	55.5%
Tolerance	6	95	47.5%
Caring	7	85	42.5%
Respect for Society	8	70	36.6%
Social Structure	9	67	33.5%
Class	10	55	22.5%

prominent values", Table 1 presents the ten most frequently stated essential principles upon which respondents reported making decisions with regard to the teaching and development of values in the curriculum programme. "Respect for all" as suggested by 86% respondents, was the most frequently stated suggestion, given by would-be teachers of modern society. *Honesty, Equality, Morality and Responsibility* come respectively on the second, third and fourth rank. The percentages 77.5%, 66.5% and 60% are given in terms of frequency percentages respectively as suggested by the teachers who were engaged in training for becoming teachers. The last but not the least important values as suggested by trainees which ranked fifth is the "Value of Responsibility" which was suggested by 86% respondents, was the most frequently stated suggestion, given by

the would-be teachers of modern society. *Honesty, Equality and Morality, Responsibility* come respectively on the second, third and fourth rank. The percentages 77.5%, 66.5% and 60% are given in terms of frequency percentages respectively as suggested by the teachers who were engaged in training for becoming teachers. The last but not the least important values as suggested by trainees which ranked fifth is the "Values of Responsibility" which was suggested by 55% teachers. Such values as *Respect for all, Honesty, Equality, Morality and Responsibility* seen to indicate that the would-be teachers/futuristic teachers play considerable important role in modern Indian society. The principles as suggested in this study by the majority of respondents highlight concern for democratic principles which would guarantee the individual in society, equality, honesty, responsibility and

TABLE 2
Five most Predominant Cultural Issues Exert Major Influence upon the Values
Dimension of Curriculum as Perceived by Futuristic Teachers (N = 200)

Most Frequently stated cultural issues	Rank	Frequency	%
Environment	1	176	88%
Community	2	163	81.5%
Place of education in the society	3	159	79.5%
Law and Order	4	132	66%
The Aesthetics	4	132	66%
Arts and	5	125	62.5%
Welfare	5	125	62.5%
Heritage	6	118	59.5%
Beliefs	7	105	54.5%
Religion	8	100	50%
Failure of Social Structure	9	87	43.5%
Economic Climate	10	74	37%
Politics	11	71	35.5%
Gender	12	68	34%

respect for all. From the results of this study three values *Respect for all*, *Honesty and Equality* are the same as were found by Kindder's (2000) study in which top scoring values which emerged, were, *Honesty, Respect, Equality, Compassion and Acceptance*. Whether it does or not, values are integral to what it means to be human and thus to human character and behaviour.

Table 2 presents the five most frequently suggested predominant cultural issues which futuristic teachers assessed as exerting major influence upon the value dimensions of curriculum. In discussion with teacher-trainees on the research question "which are the five predominant cultural issues which exert major influence upon value development dimensions according to their perception?" In discussion with respondents, it emerged that teacher-trainees' responses to this question were, to a large extent, based upon sociological perspectives. *Environment*, suggested by 88% respondents, was the most frequently suggested current cultural issue which in the recent times has become the focus of much media attention and has to be dealt with by futuristic teachers in the classroom context. *Community and Place of Education in the Society* ranking close together respectively on the second and third place with the percentage 81.5% and 79.5% respectively. In the interviews with respondents it emerged that teacher trainees' interest in these issues was predicated on the concern for those in need and a belief in the necessity to foster in people a feeling of societal responsibility because it is clear that only through education, developments in

society can occur. Law and Order and the Aesthetics has been emerged on the fourth place along with *the Arts and Welfare* at the fifth rank getting percentages 66% and 62.5% respectively. While discussing such ranked cultural issues, it was ascertained that futuristic teachers believed that these values should be obtained through community negotiations and ethical concerns. The importance of society, rules and regulations, welfare, theoretical values concerning education and attention towards environments have been identified in the present study. The much more differentiated but less similar results were found by Pucko and Polak (1998) in which religion was mentioned as a cultural issue but environment was considered less significant cultural issue than religion having an influence on value-orientation and value education in schools.

Since education prepares young children for adulthood, therefore, the preservation of cultural values and passing on the cultural heritage to next generation has to be the responsibility of education (Pant, 2001). Hence, it is in the educational circles that action has to be planned and executed to provide opportunity to all for living effectively in a multicultural environment. Though the role of other factors like family, society, polity and media is acknowledged but the education system and educationists have to be fully aware of their role in this regard and there must have been fiercely debating on the issue of transmission of values, cherished in their culture.

In classroom situations four most frequently used formal strategies

TABLE 3

Four most Frequently suggested formal Strategies which Futuristic Teachers Report using in the Area of Value Development in the Classroom Context (N = 200)

<i>Formal Strategies</i>	<i>Rank</i>	<i>Frequency</i>	<i>%</i>
Assemblies	1	165	82.5%
Discussion	2	158	79%
Through Stories	3	120	60%
School Politics	3	120	60%
Planning	4	108	54%
Selective Questioning	5	97	48.5%
History	6	77	38.5%
Drama	7	65	32.5%
Organisation	7	65	32.5%
Role Play	7	65	32.5%

suggested by futuristic teachers in Table 3 represents the four most frequently used formal strategies suggested by futuristic teachers in the classroom situation in which the highest ranked strategy is Assembly with the highest frequency, i.e. 165 out of 200. Discussion with respondents indicates that while assembling these may create such an innovative interaction between teachers and students, students and students, and pupils and administration. An assembly develops the values regarding *Discipline, Balance, Cooperation and Shradha* for God and group work. The *Discussion, Through Stories, School Politics and Planning* have been placed on, respectively, second, third and fourth place as the respondents had ranked *Through Stories* and *School Politics* both on the third place. The formal strategies *Assemblies, Discussion, Through Stories, School Politics and Planning* have obtained the percentages 82.5%, 79%, 60%, 60% and 54% respectively. The respondents suggested that the use of *Assembly* and

Discussion are the most important and useful strategies for value development and it is necessary for both teachers and students to facilitate and initiate discussion imparting values in students. Prayers sung in chorus help to create faith in a supreme power in young minds. Patriotic songs sung in chorus help to inculcate belief in secularism and patriotism in the students. Specific emphasis should be given on a particular value everyday during the morning assembly. As suggested in the Parliamentary Committee's report: "In Morning Assembly, students may also be encouraged to make presentation on different subjects with special focus on patriotism, national integration, humanism, cultural unity in diversity, service and sacrifice, secularism and prevailing social problem" (Kumar, 2003). Besides these stories, school politics and planning can also be usefully employed in this area. As the would-be teachers stated the above mentioned formal strategies on the base that these are the best way of preparing their pupils

for adulthood. Such belief of teacher-trainees underlying the practical strategies like Assembly, Discussion, School Politics, etc. which they can employ in the area of value point of an underlying conviction of a consensus pluralism model as a basis for values teaching in schools.

Table 4 outlines the four most frequently cited informal teaching strategies which have been considered essential by the futuristic teachers for value development in students. The result indicates that teacher trainees have preferred flexible methods as *Using Good Examples*, *Group Work*, *Positive Work/Behaviour* and *Criticising* in this regard. During discussion with respondents, they considered *Using Good Example* as the best informal teaching strategy for value development and had ranked it the highest percentage, i.e. 92%. The remaining three informal strategies had ranked on second, third and fourth place with percentage 88%, 79.5% and 73%

respectively. The most striking aspect which emerged after discussion with futuristic teachers that they favoured these strategies because of their flexibility, which allowed for the inclusion of topical subjects and the matter of value inculcation.

Both in the formal and informal methods, the most striking point of both responses is the indication given to the importance of talk within secondary classes. Both in the informal method where talk seems to lie predominantly with teachers and students while in discussion teacher can encourage the pupils to make their contribution and in the formal method where using Good Example and group work both teacher and students can be involved and such a verbal communication in both types of strategies can be valuable for students for value-development. The use of good example, positive work/behaviour and criticising emphasise the perception of central responsibility of the teacher and these must have to be applied in the

TABLE 4

Four most Frequently cited informal Teaching Strategies which Teacher Trainees consider Essential for Development of Values in Classroom Context (N = 200)

<i>Informal Strategies</i>	<i>Rank</i>	<i>Frequency</i>	<i>%</i>
Using Good Examples	1	184	92%
Group Work	2	176	88%
Positive Work/Behaviour	3	159	79.5%
Criticising	4	146	73%
Expectation of Standards	5	134	67%
Praising	5	134	67%
Talking about Attitude	6	123	61.5%
Seating	6	123	61.5%
Reward	7	105	52.5%
Teacher Example	7	105	52.5%
Classroom Organisation	8	82	41%

context of value development in students. It may be concluded that the undermined conclusions/responses regarding formal and informal teaching strategies emphasising on the predominance of the spoken words and the importance attached to the general ethics of the classroom and the strategies applied by the futuristic teachers to achieve such ethos.

Conclusions and Implications

With the growth of electronic communication systems, barriers of distance, nationality, culture and ideology are being challenged and recast. The values which would previously have been attributed to a specific milieu or locale are now being reformulated within a more global perspective according to the consequences of the stretching of time and space. With the rise of multinationalisation of aspects of social, economic and political life, it is the system of values which informs such a process of internationalisation that requires examination, critique and explanation. The education system needs to prepare for the process of reform of their curricula, specifically in relation to areas which would be regarded as pertinent to value education because *education cannot be value neutral*. Even the absence of values portrays a value and may be described in terms of moral vacuum.

The technological innovations have dehumanised the process of learning where values are reduced to the state of extinct exhibits. Even educational innovations and introduction of the technological aspects into the body of learning reduced the space and scope

for the role of individual. Objects have also mechanised values. The crux of the problem with the technological innovations in the field of learning is that the animate subjects in the form of individual learner are becoming the tools in the objects of their study. This trend has successfully introduced mechanical values rather than human values. The learners too unconsciously fall into the snare and conveniently forget any talk of human values. The learner thus trained can't be expected to play socially beneficial role in future. The relocation and social fixation of the individual in the learning process is the need of the hour (Reddy, 2002).

The survey conducted for this study outlines the recent perspectives of value orientation which includes the classroom strategies, role of curriculum, teacher-trainees' perception, need of an appropriate action for value-development and predominant cultural issues exerting major influence upon value-dimensions of curriculum. These are the important aspects most frequently suggested by futuristic teachers who participated in the study.

As the respondents suggested that value teaching was best accomplished in an open and balanced way and approached through an integrated curriculum not only in teacher education course but also in school curriculum. The ecological value (for example, environmental issues) were also emphasised and became incorporated into universal values. Respondents perceived a need to balance the requirement of the community with those of the individuals because futuristic teachers have a responsibility

to allow students to develop the perception of themselves and their role as members of a local, national and global community. The absence of more sophisticated and spiritual value (religion) is evident. Religion being an important cultural issue, having an influence on value orientation and value education in schools, has not been ranked on prominent place. While reporting on the question related to predominant cultural issues, many of the respondents had shown difficulty in grasping the concept of the influence which may exert broader socio-cultural context in the curriculum. Such responses are able to be distinguish in responses which dealt with the cultural influence of the concepts which society in a broader sense exhorts such as Environmental Issues, Community, Place of Education in the society, Law and Order, The Aesthetic, the Arts and Welfare and such a picture of value preferences presents the changing face of teacher education which is about to enter the work force of current era of societal reform and transition.

The conclusion drawn from the above discussion is that the present learning system had a deviation from the earlier (ancient and medieval learning patterns). *Nature, God and Religion* were the main pivots around which the ancient and medieval scholarship and learning revolved. Even philosophy had its base in religion, God and the human wish for the attainment of heavenly kingdom. The binary frictions—one of the internal friction of an individual regarding social validity and justification and another is the friction about social efficiency of learner choice—had to do

something with the changing values and social choice. The fructification of modern social (e.g. education), economic and political structure required an equal emphasis in the education system to train people to suit the interest of the social structure.

According to the opinion of student-teachers discourses about values in schools are too much theoretical to influence behaviour. While reporting the findings regarding formal and informal teaching strategies which the futuristic teachers want to use in the classroom, it was found that the democratic and flexible strategies like Assembly, Discussion, Story-telling, Group Work, Productive Work/Behaviour, etc, have been preferred which are called the active methods and really important means of effective communication and interaction between teacher and students. It has been emerged from this study while addressing these strategies, the would-be teachers have concentrated upon the process skills area of value education.

The principles which may form the basis for the development and implementation of strategies and an approach must be appropriate, authentic and practical. In developing and implementing formal and informal teaching strategies some facts should be considered important as the curriculum content in relation to value education needs to be appropriate to the students experience, stages and styles of learning and cultural setting also. The strategies to be used, should motivate the student and arouse their interest and curiosity. Opportunities should be provided to recognise the complexities of defining

right and wrong, to understand and compare values and beliefs they hold with others, from opinions and morally justified conclusions, discuss differences and manage conflicts in non-violent way and communicate their understanding of values through their behaviour. While implementing value education in the range of educational settings, the would-be teachers need to adopt processes and strategies suited to individual, cultural and social settings. These processes and strategies may include the use of cooperative learning, learning in small groups, inquiry approach, problem-solving activities, promotion of rationality, self-esteem, empowerment, tolerance, empathy, appreciation of others, promotion of rationality, self-esteem, empowerment, tolerance, empathy, appreciation of others, conflicts resolution skills, meditation skill and collaborative decision-making activities. Value education, both formal and informal in training for teachers, may encourage pupil teachers to develop ... Actions (Kumar, 2003).

The responses of futuristic teachers to the research question seeking perception of principles upon which decision are made regarding the value education dimension of the curriculum, stressed the element of *Mutual Respect, Respect for All, Honesty, Equality, Morality, Responsibility, Tolerance and the need of values which reflects the core issues of the society.*

The conclusion which has emerged from this study is that what is needed is to be open to a range of values and to

support value education with a range of approaches within the classroom as well as within teacher education programme. In addition, the teaching of values should be regarded as being an integral and inextricable component of all other areas of the study and this should not be artificially separated or divorced from them. All bodies of knowledge involving values, attitude of teachers in classroom and curriculum of teacher education programme are responsible for presenting a balancing holistic and well-rounded approach for value development. As the teachers are role models for value development, hence, it is really necessary that would-be teachers are required to examine critically their own values and to reflect upon the values they portray through their teaching methods, methods of assessment and evaluation, selection of the content matter, their relationship with students and colleagues. The suitable learning environment that teachers can construct, the classroom climate they can create, and the philosophy they hold as education as a social process, also need consideration and form performing all these tasks, it is necessary to develop in teacher trainees the ability of critical awareness of value domain and understanding personal responsibility for the values they embrace. Besides these, the need is not only to internalise values only by experiencing them in everyday life, in society, with parents, teachers and classmates, but also to adjust value education to changing times.

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General School Education in India and Development Thereof

VIRENDRA P. SINGH*

Abstract

The paper attempts to study the major initiatives on the educational development, particularly general school education in India. It covers briefly the constitutional provisions, public expenditure, Government policies and programmes, new challenges, quality implications in the wake of new economic policy and other developmental issues to provide access to school education of satisfactory quality in the country. The present study provides the future dimensions to the educational policies and programmes in school education for initiating necessary interventions.

Key words: General school education, Educational development

Education is a continuous and creative process. Its aim is to develop the capacities latent in human nature and to coordinate their expression for the enrichment and progress of the society, by equipping children with spiritual, moral and material knowledge. It is widely known but worth repeating that education is of value in itself (intrinsic value) and is valued for what it can do (instrumental value). Education is desired for itself as it opens up a vast world of opportunities and ideas to the

educated person. It is of great instrumental value in the process of economic growth and development. The objective of the socio-economic development is to improve the quality of life of the people through enhancing their well-being, and provides them opportunities and choices to become productive assets in the society. Especially in the world's poor countries, a better quality of life generally calls for higher incomes – but it involves much more. It encompasses, as ends in

* Department of Educational Surveys and Data Processing, National Council of Educational Research and Training, New Delhi.

themselves, *better education*, higher standards of health and nutrition, less poverty, a cleaner environment, more equality of opportunity, greater individual freedom and a richer cultural life. It can be achieved by developing the powers and abilities of individuals resting within them, so that they may contribute their share to an ever-advancing civilisation. Hence, the concept of free and compulsory school education got priority in India with a systemic and planned approach.

The planned approach of educational development is more crucial because it involves changes in knowledge, skills, interests and values of the people as a whole. This is basic to every programme of social and economic betterment of which India stands in need. The educational development is an instrument of change to be achieved without violent revolution (and even for that it would be necessary). Other developmental activities may help, and can indeed sometimes have a more apparent impact, but education is the only instrument that can reach all the people through increasing people's participation. It is a difficult instrument, whose effective use requires strength of will, dedicated work and sacrifice. But it is a sure and tried instrument, which has served other countries well in their struggle for development. It can, given the will and the skill, do so for India (NCERT, 1970).

The progress of development through statistical measurement is important for a number of reasons. Quantitative measures of development are needed to indicate the extent of economic and

social well-being, to serve as a benchmark for future planning, to serve as instruments of monitoring, evaluation and control of on-going programmes, to facilitate spatial and temporal comparisons of development and to serve as a criterion for granting aids and loans. Needless to emphasise, if the measures of development are to be meaningful, they must be consistent with the objectives of development (Singh, 1994). With India to be the world's second top populated nation, and given India's very long experience and commitment of her Government to promote Education for All, it seems worthwhile to analyse the status of educational development in the country taking place since the Independence. This paper is a modest attempt in that direction.

Provisions Attributed to School Education: A Brief Review

The last half-century, which is also the first half century of India has passed through an exciting stage of educational development. The national goal of the Universal Elementary Education (UEE) of satisfactory quality for all children up to the age of 14 years and total eradication of illiteracy are still elusive; and the country has stepped ahead with 34.62 per cent (35.56 crore) or so illiterate people in the twenty-first century. Hence, in view of the UEE and policy underlying it, higher education including professional education and other programmes, etc. are not included in the paper. In the following paragraphs, we present a brief review of the constitutional provisions, public expenditure, facilitating Government policies and programmes, and major

thrusts and issues of challenges attributed to the educational development in regard to school education.

Constitutional Provisions

The success of democracy depends on the growth of a spirit of cooperation, disciplined citizenship and the capacity of the ordinary citizen to participate intelligently in public affairs. Prior to Independence in 1947, the colonial regime established a system of education that had limited access and denied mass education. It gave greater emphasis on conformism to socio-economic and political system obtained in the country in those times. Lord McCauley (founder of educational system under the British regime) explicitly stated that the objective of educational system was to create new breed of the Indians as similar to the Europeans as possible. It was on this account that the Indian National Movement developed a strong critique of the British system that only imparted *Learning Skills* and not *Life Skills*. It did not respect Indian traditions, which expressed the global sentiments of Education for All (Mohanty, 2001). To achieve it, the Indian Constitution requires that within 10 years of its commencement, free and compulsory education should be provided for all children up to the age of 14 years.

In the complex process of educational planning and implementation, the State Government occupies a central and key position. They have to accept, for instance, full responsibility for all school education, but are advantageous for them to

discharge it in collaboration with local authorities. In higher education, on the other hand, they will have to share the responsibilities with the universities, the University Grants Commission (UGC) and the Government of India (GOI). In other words, school education is predominantly a local-state partnership; and higher education is a centre-state partnership. The GOI being conscious of the situation and considering impediments in implementation of educational policies and programmes at the grassroot level has made some landmark provisions. Till the 42nd amendment of the Indian Constitution, education was in the State List except for certain specified items. The objective of incorporating education in the Concurrent List was to facilitate evolution of the All India Educational Policies. The concept of concurrency was given an operational meaning by the National Policy on Education, 1986. The policy envisaged concurrency as a "Meaningful Partnership between the Centre and States" and placed on the Central Government larger responsibilities. In the process of amendments to the Indian Constitution, 73rd and 74th amendments are expected to promote decentralised management of educational development and participation of community in promotion of education through the Panchayati Raj Institutions (PRIs) and Local Bodies. The 93rd Constitutional Amendment provides the elementary education as fundamental right of the child (between the age of six and fourteen years) and fundamental duty of parents – a step in right direction to run the Indian Democracy.

TABLE 1
Plan Expenditure/Outlay on Different Sectors of Education, 1951 to 2002

(Per Cent)

Sector-wise Expenditure on Educational System	Five Year Plan/Annual Plan										
	First	Second	Third	Annual	Fourth	Fifth	Sixth	Seventh	Annual	Eighth	Ninth
	1951-56	1956-61	1961-66	1966-69	1969-74	1974-78	1980-85	1985-90	1990-92	1992-97	1997-02
Elementary Education	56 (85)	35 (95)	34 (201)	24 (75)	30 (239)	35 (317)	33 (836)	37 (2849)	37 (1729)	47 (9201)	58 (11842.8)*
Secondary Education	13 (20)	19 (51)	18 (103)	16 (53)	18 (140)	17 (156)	21 (530)	24 (1832)	22 (1053)	18 (3498)	13 (2603.5)
Higher Education	9 (14)	18 (48)	15 (87)	24 (77)	25 (195)	22 (205)	22 (559)	16 (1201)	12 (588)	8 (1516)	12 (2500.0)
Adult Education	-	-	-	-	-	-	9 (224)	6 (470)	9 (416)	9 (1848)	3 (630.4)
Others	9 (14)	10 (30)	12 (73)	11 (37)	14 (106)	14 (127)	4 (108)	3 (198)	3 (118)	4 (751)	2 (431.4)
Total General Education	87 (133)	82 (224)	79 (464)	75 (242)	87 (680)	88 (784)	89 (2257)	86 (6550)	82 (3904)	86 (16814)	88 (18008.1)
Technical Education	13 (20)	18 (49)	21 (125)	25 (81)	13 (106)	12 (107)	11 (273)	14 (1083)	17 (823)	14 (2786)	12 (2373.5)
Total Education	100 (153)	100 (273)	100 (589)	100 (323)	100 (786)	100 (912)	100 (2530)	100 (7633)	100 (4727)	100 (19600)	100 (20381.6)*
Total Plan Expenditure	1960	4672	8577	6625.4	15779	39426.2	109291.7	220216.3	123120	434100	859200
Education as % of Plan	7.8	5.8	6.9	4.9	5.0	2.3	2.3	3.5	3.8	4.5	2.4

* Excludes the sum of Rs 4,526.74 crores for Nutritional Support to Primary Education (Mid-day Meals) for the last three years of the plan. Figures in parentheses are in crores of rupees.

Source: (1) Government of India (2000). *India 2000-A Reference Annual*. Publication Division, Ministry of Information and Broadcasting, New Delhi. (2) *Dairy India* (1997). Edited by P.R. Gupta, A-25, Priyadarshini Vihar, Delhi.

Despite constitutional efforts at free and compulsory elementary education, 12 States and 4 Union Territories (UTs) in India have enacted legislation for free and compulsory primary education till date. All States have exempted children from tuition fees up to upper primary classes. The compulsion has not been enforced due to socio-economic and political considerations till today (Mohanty, 2001). However, it will be required to remodel the education system at the elementary level in regard to the education as a fundamental right of children in the light of expected constitutional amendment.

Public Expenditure

With the systematic initiation of Five Year Plans, education sector has progressively been receiving more and more emphasis and getting greater allocation of funds. Table 1 sets out the plan-wise expenditure on different sectors of education in India. It reveals information on elementary, secondary, higher, adult and technical education as well as other programmes. The actual expenditure in terms of rupees on education in India was Rs 153 crore during the First Five Year Plan. The share of investment on education to total outlay of the First Five Year Plan (1951-56) was 7.8 per cent, which reduced to 2.4 per cent (2.9 per cent including nutritional support to primary education) in the Ninth Five Year Plan. Moreover, the expenditure on education has been below 3.2 per cent (3.4 per cent including nutritional support) of total plan expenditure or so during all plan periods in post-Independence era in the country. In addition, the proportionate

increase in total plan expenditure has not been at par with an increase in expenditure on education over different plan periods, and exhibits an erratic allocation/expenditure on education (Table 1).

The outlay of the Ninth Five Year Plan is higher than the Eighth Five Year Plan by 2.7 times. The outlay for the education sector for the Ninth Five Year Plan under Central Sector was Rs 20,381.64 crore (against Rs 7,443 crore for the Eighth Plan). It excluded the sum of Rs. 4,526.74 crore for nutritional support (mid-day meal) to primary education for the last three years of the Ninth Five Year Plan. The Central Plan outlay for education had been substantially increased from Rs 1,825 crore in 1995-96 to Rs 4,700 crore in 1999-2000 and to Rs 5,450 crore in 2000-2001 in which Rs 3,728.75 crore was for elementary education and literacy programmes and Rs 1,721.25 crore for secondary and higher education. The outlay on elementary education was 66.22 per cent of the total Central Sector Plan outlay in 2000-2001. Further, the outlay was Rs 600 crore for secondary education, Rs 501.85 crore for university and higher education, Rs 120 crore for adult education and Rs 500 crore for technical education (GOI, 2001a).

However, the total expenditure on various educational development programmes and training had been Rs 4,37,637.09 crore or so from 1951 to 1998. Quantitatively, the total expenditure on education and training increased nearly 944 times, i.e., from Rs 64.46 crore in 1951 to Rs 60,857 crore in 1998. In 1998, the total

TABLE 2
Gross Domestic Product (GDP), Gross Private Domestic Capital Formation (GPDCF) in GDP,
Total Expenditure on Education, All Sectors in India on Selected Years, 1951 to 1998

Year	GDP	GPDCF as Per Cent of GDP	Total Expenditure on Education and Training	Educational Expenditure as Per cent to GDP	Plan Expenditure on School Education*		Per Capita Plan Expenditure on General Education*
					Total	Per Pupil	
	(Rs Crore)	(Per cent)	(Rs Crore)	(Per cent)	(Rs Crore)	(Rs.)	(Rs)
1951	9445	7.8	64.46	0.68	21	8.82	0.74
1961	15999	8.4	260.30	1.63	60.8	13.5	2.11
1971	41957	9.9	1011.07	2.41	75.8	9.7	2.48
1981	143256	12.3	4435.90	3.00	273.2	25.9	6.61
1991	589273	13.1	22349	3.79	1391	92.43	23.07
1998	1616033 (P)	14.8	60857	3.77	3794.6	216.3	46.67

(P) Provisional Figure.

* The total plan expenditure on school/general education for selected points of time is taken on an average basis computed from the expenditure of corresponding plan periods, e.g. for 1951, (a) the total plan expenditure on elementary and secondary education during the First Plan period (1951-52 to 1955-56) is divided by 5, (b) per pupil plan expenditure is worked out by the average plan expenditure on school education (elementary + secondary), which is further divided by total school enrolment including primary, upper primary and High/Hr. Sec./Inter/Pre-Degree. Similarly, the per capita plan expenditure is worked out (average plan expenditure on general education/population of the country).

Sources: Information on Column 2, 4 and 5 are cited from the Government of India (2001). *Selected Educational Statistics 1999-2000*. Planning, Monitoring and Statistics Division, Ministry of Human Resource Development, New Delhi. Information on Column 3 is cited from the Government of India (2001). *Economic Survey 2000-2001*. Economic Division, Ministry of Finance, New Delhi.

expenditure on education and training was estimated nearly 3.77 per cent to the GDP (Table 2).

Facilitating Government Policies and Programmes

A public policy choice is considered rational if: (a) its objectives reflect what the people, by and large, want the Government to do for them; and (b) the instruments or means employed promise or actually attain, with the least possible cost, the specified objectives within the prescribed time limit and under the prevailing environment¹ (Singh and Singh, 1998). To examine the rationale of selected policy measures that have been used in India to promote school education has been attempted in this section.

Assessment of Educational Development up to 1950

In the First Five Year Plan, an attempt was made to assess educational development up to about 1950. It was pointed out that only 40 per cent children in the age group 6–11 years and 10 per cent in the age group 11–17 years were attending the schools. There were disparities in the provision of educational facilities between different parts of the country, between different sections of the population and, in particular, between urban and rural areas. Considerable wastage occurred at various stages of the educational system. Facilities for technical and vocational education were altogether inadequate. The proportion of teachers without training exceeded 41 per cent in primary schools and 46 per cent in secondary schools. There was a

considerable shortage of women teachers². Scales of pay and conditions of service for teachers were generally unsatisfactory and were in part responsible for low teaching standards. Apart from the consolidation and improvement of existing facilities, priority was given to the experiments and research in improved educational methods, the training of teachers, the preparation of literature for teachers, children and adults, the provision of adequate facilities for basic and social education and the development of facilities for technical and vocational education at lower levels as well as for training high grade technicians in certain selected fields.

Institutional Development and Programmes

The Central Advisory Board of Education (CABE), set up during the pre-Independence period in 1935, continues to play a lead role in the evolution and monitoring of Government policies and programmes on education, the most notable of which has been the *National Policy on Education* (NPE) 1986 revised in 1992 and *Programmes of Action* (POA) 1992. However, the Central Government has a clear responsibility regarding the quality and character of education. In addition to policy formulation, the Ministry of Human Resource Development (MHRD), Government of India, shares with the states the responsibility for educational development.

At the national level, some organisations/societies/institutions including Central Board of Secondary

Education (CBSE), National Council of Educational Research and Training (NCERT), National Council for Teacher Education (NCTE), National Institute of Educational Planning and Administration (NIEPA) and National Open School (NOS) have been established for promoting the development in school education and its allied disciplines, and for imparting school education, Kendriya Vidyalaya Sangathan and Navodaya Vidyalaya Samiti came into existence under the Government of India.

Several centrally (externally) sponsored (funded) schemes are made operational by the Government of India to meet the needs of the educationally disadvantaged people in pursuance of the emphasis embodied in the NPE. The important schemes by way of illustration are the Educational Surveys on School Education to provide basic inputs, Operation Blackboard, Non-formal Education, Teacher Education, National Programme of Nutritional Support to Primary Education, District Primary Education Programme, Total Literacy Campaign, Intensive Programme for Backward Minorities and Integrated Education for Disabled Children and *Sarva Shiksha Abhiyan* (SSA), etc.

Organisation and Structure of School Education

Decisions regarding the organisation and structure of education are largely the concern of the states. In 1977, the Government of India accepted a common education pattern of 10+2+3 years in the country. It has been introduced in most of the states providing for ten years of

general two years of specialised education at the school level and three years of higher education at the university level. But the organisation and structure of education up to secondary stage is still heterogeneous between the states. Exhibit 1 provides the pattern of school education in different states in India. As evident from the table, the nation has four types of school education pattern for primary, upper primary and secondary stages in terms of duration in years. The majority of the States/UTs for primary, upper primary and secondary stages follow the school education pattern of 5+3+2 years. The next pattern of school education in line is of 4+3+3 years. It is stated by several educationists that the structure and duration of the educational courses under different educational stages have a direct bearing on the quality of education. Hence, it requires a common pattern through constitutional vis-a-vis regulatory approach with an immediate attention throughout the country.

Elementary/Non-formal and Secondary Education

The Government of India attaches great importance to the elementary education and has accepted the UEE as the national goal. The NPE 1968 and NPE 1986 as revised in 1992 states in aggregate that free and compulsory education of satisfactory quality should be provided to all children up to the age of 14 years, besides ensuring higher Government and non-Government expenditure on education that should constitute 6 per cent of GDP before the commencement of twenty-first century.

EXHIBIT 1
State-wise Pattern of School Education in India as on 30 September 1993

States/Union Territories	Duration of School Education Stages in Years			
	Elementary Education		Secondary Education	
	Primary	Upper Primary	Secondary	Higher/Senior Secondary
Arunachal Pradesh, Bihar, Haryana, Himachal Pradesh, Jammu & Kashmir, Madhya Pradesh, Manipur, Orissa, Punjab, Rajasthan, Sikkim, Tamil Nadu, Tripura, Uttar Pradesh, West Bengal, A&N Islands, Chandigarh, Delhi, Pondicherry (Information on recently created three States are captured by the Bihar, Madhya Pradesh and Uttar Pradesh)	I-V (5 Years)	VI-VIII (3 Years)	IX-X (2 Years)	XI-XII (2 Years)
Andhra Pradesh	I-V (5 Years)	VI-VII (2 Years)	VIII-X (3 Years)	XI-XII (2 Years)
Assam, Goa, Gujarat, Karnataka, Kerala, Maharashtra, Mizoram, Dadra Nagar Haveli, Daman and Diu, Lakshadweep	I-IV (4 Years)	V-VII (3 Years)	VIII-X (3 Years)	XI-XII (2 Years)
Meghalaya, Nagaland	I-IV (4 Years)	V-VIII (4 Years)	IX-X (2 Years)	XI-XII (2 Years)

Source: Guidelines for Survey Officers, *Sixth All India Educational Survey*, National Council of Educational Research and Training, New Delhi.

It develops some of the most basic capabilities for human development and creates a base of numeracy and literacy that enables people to be more innovative and productive (United Nations Development Programme, 2001). It was an unfinished dream of the Government of India by the end of 2000 AD and could not practically be provided till today. Hence, a new scheme, *Sarva Shiksha Abhiyan* (SSA) has been evolved to pursue the UEE in a mission mode. The goals of SSA are: that all 6–14 age children (i) are in school/Education Guarantee Scheme (EGS) Centre/bridge course by 2003, (ii) complete five-year primary education by 2007, and (iii) complete eight years of schooling by 2010. The Central and State Governments have over a period of time evolved strategies to check drop-out rates and improve levels of achievements in the schools, the key elements of which include and are described below (GOI, 2001a):

- i) Creating parental awareness and community mobilisation
- ii) Involvement of communities and PRIs
- iii) Economic incentives
- iv) Improvement in the infrastructural facilities in schools
- v) District primary education programme initiative
- vi) National programme of nutritional support to primary education (mid-day meal)
- vii) Non-formal education schemes
- viii) Teacher education scheme.

The Government of India has been running a programme of Non-formal Education (NFE) for children 6–14 age

group who remain outside the formal system due to various reasons since last two decades. These include drop-outs of the formal schools, children from habitation without schools, working children, children who assist in performing domestic chores, and girls who are unable to attend formal schools. Though the focus of the scheme is on 10 educationally backward states, it also covers urban slums, hilly, tribal and desert areas. At present, the programme is in operation in 25 States/UTs. Currently, 2.97 lakh NFE centres have been sanctioned catering to about 74.25 lakh children, of which about 1.17 lakh centres are exclusively for girls. About 58,788 NFE centres are being run by 816 voluntary agencies in the country. The NFE scheme has been evaluated by the Planning Commission, Government of India, and based on which the scheme is revised with a new nomenclature as the Education Guarantee Scheme and Alternative and Innovative Education (EGS&AIE). The revised scheme will be a part of the overall national programme framework for UEE, the SSA (GOI, 2001a).

The secondary education serves as a bridge between the elementary and higher education to prepare young persons of the age group 14–18 for entry into higher education. Nearly two-thirds of the eligible population remains out of secondary school system. The achievements made so far in secondary education indicate that secondary and higher/senior secondary level institutions increased from a mere 7.42 thousand in 1951 to 1,521 thousand in 1998 (Table 3).

TABLE 3
Selected Indicators of Growth and Development on School Education in India,
1950-51 to 2000-01.

Educational Indicator	Unit	Year					
		1950-51/ 1951	1960-61/ 1961	1970-71/ 1971	1980-81/ 1981	1990-91/ 1991	1997-98/ 1998*
Population	Male	Crore	18.55	22.63	28.40	35.34	50.04
	Female		17.56	21.29	26.41	33.00	46.53
	Total		36.11	43.92	54.81	68.34	96.57
Literacy Rate	Male	Per cent	24.95	34.44	39.45	56.50	73.00
	Female		7.93	12.95	18.69	29.85	51.00
	Total		16.67	24.02	29.45	43.67	62.00
School Enrolment by	Primary	Million	19.2	35.0	57.0	73.8	108.7
	Upper Primary		3.1	6.7	13.3	20.7	39.5
	High/Hr. Sec./Inter/Pre-Degree		1.5	3.4	7.6	11.0	27.24
Teachers by	Primary	Thousand	538	742	1060	1363	1872
	Upper Primary		86	345	638	851	1212
	High/Hr. Sec./Inter/Pre-Degree		127	296	629	926	1521
Number of Educational Institutions	Primary	Thousand	209.67	330.40	408.38	494.50	610.76
	Upper Primary		13.60	49.66	90.62	118.56	185.51
	High/Hr.Sec./Inter/Pre-Degree		7.42	17.33	37.05	51.57	107.10

* Population for males, females and total are reported 53.13, 49.57 and 102.70 crore, and literacy rate for males, females and total are reported 75.85, 54.16 and 65.38 per cent, respectively for 2001 as per Census 2001.

Source: Government of India (2001). *Selected Educational Statistics 1999-2000*. Planning, Monitoring and Statistics Division, Ministry of Human Resource Development, New Delhi.

Major Thrusts and Issues of Challenges

The country has completed 50 years of her glorious past in 1997. At this point of time, the Government of India formulated the Ninth Five Year Plan (1997-2002) with an objective to march towards the next millennium with over one billion Indian people. The plan document reveals that education as the most investment in human development, and proposes to eradicate illiteracy from India by 2005 AD. It also manifests regarding special action plans by identifying the expansion and improvement of social infrastructure in education. To provide access to schooling, priority to children has been given by the Government of India. The commitment for UEE (to mean universal access, universal retention, universal achievement) and adult literacy in the past have resulted in marked improvement in literacy rates over the last five decades, however the targets of UEE continues to elude achievement. A special thrust is given on girls' education by providing free education up to college level including professional education. It is also planned to expand the vocational education at secondary and undergraduate levels, and restructure so as to have strong linkages with industry and employability (GOI, 1997).

The role of PRIs and Local bodies (through educational committees) is expected to increase substantially in the process of decentralisation at grassroot level of educational planning after 73rd and 74th constitutional amendments in the country. The education committees will acquire new responsibilities to carry

out the complex tasks with a better control on school education. It will require careful planning to prevent the administrative weaknesses that arise due to various reasons. The challenge of improving school education in India will be met by strong institutions at the block, district and state levels that can provide the necessary support. Strengthening these institutions has been objective of the national policy. The challenge for education committees is to identify the tasks that they could carry out effectively. In recent years, absenteeism of teachers has been a major problem in schools. It could be effectively achieved by vesting control of schools in education committees to monitor teachers' attendance — an important way of improving the effectiveness in school education (World Bank, 1997).

As a result of the efforts made by the Central and State Governments, 94 per cent of country's rural population has primary schools within one km. At the upper primary stage, 84 per cent of the rural population has schools within a distance of three km. The enrolment ratio at primary stage has gone up from 42.60 per cent in 1950-51 to 92.14 per cent in 1998-99 (GOI, 2001b). The number of primary and upper primary schools has increased from 2.23 lakh in 1951 to 7.96 lakh in 1998 whereas the number of teachers in primary and upper primary schools has expanded from 6.34 lakh in 1951 to 30.84 lakh in 1998 (Table 3). What is even more challenging is that roughly 50 million children in the age group of 6-11 years are not attending school today. This directly translates to 50 million

uneducated citizens of India for decades to come. Most of these children are predestined to go through their lives without reading newspapers, filling in forms, obtaining blue-collar industrial jobs, and participating in the information age. This lack of education diminishes their options for the future and ensures existence on the edge of poverty (Parikh, 1999). The uneducated child of today (2001 AD) will become the uneducated voter of 2019 AD and onwards.

In addition, about half the Indian adult population and women continues to be illiterate. The literature available on the human development reports identifies several sensitive elements that contribute to women's well-being. It also requires an assessment of their political, economic and professional participation. Clearly, the issue of women's status, level of empowerment, and ability to respond to new opportunities or cope with adverse circumstances is a complex one, and cannot be adequately captured by any statistical profile. Yet, the ultimate concern of development professionals or policy-makers should be to devise policies that take these issues of challenges into consideration. It is hoped that such issues will be useful in assessing the educational status of women, men, and children, and in formulating gender sensitive policies on school education that will facilitate their educational development (Shariff, 1999).

Impact of Educational Development on School Education

Education plays a critical role in demographic transition; female education, in particular, is important in the process of lowering fertility and

mortality. In India, the female literacy rate increases from 7.93 per cent in 1951 to 54.16 per cent in 2001, which needs to be improved by primary schooling for better health outcomes. Moreover, the total literacy rate went up from 16.67 per cent in 1951 to 65.38 per cent in 2001 (Table 3). There is strong empirical correlation between literacy and life expectancy (Anasari, 1986). An educated and skilled workforce contributes to higher economic growth. In political and social terms too, schooling creates an educated population and a more knowledgeable citizenry. Education empowers and, through empowerment, affects larger social processes. Widespread illiteracy prevails in India because we have neither made primary education compulsory nor provided adequate resources to equip we have neither made primary education compulsory nor provided adequate resources to equip schools with needed infrastructure and teachers. Our efforts in terms of translating a given expenditure on educational services into educational outcomes are marred by poor efficiency.

The situation in India today is one of low achievement in education combined with significant inequalities across, sexes, regions, social classes as well as castes and communities. Tangible progress has been made in the last decade of the twentieth century in school enrolment but the situation is far from satisfactory. Particular attention needs to be paid to the gender gap in educational achievements and to promote the education of females. However, school enrolment of students registered an increase of 23.8 million

(primary, upper primary and secondary and senior secondary were 19.2, 3.1 and 1.5 million) in 1951 to 165.44 million (primary, upper primary and secondary and senior secondary were 108.7, 39.5 and 27.24 million) by the end of 1998. As evident from Table 2, the primary education (secondary and senior secondary) occupies the lowest (highest) per cent change in 1998 over 1951.

Teachers are, perhaps, the most important resource in a school. There is little doubt that the schooling system in India needs more teachers. There has been enormous increase in school teachers after Independence. Table 3 furnishes details of statistics regarding school teachers. Quantitatively, around 1.87, 1.21 and 1.52 million teachers were available to teach the Indian students at primary, upper primary and secondary and senior secondary stages by the end of 1998. The quality of school infrastructure in the country is deplorable. It is clear that expansion of primary education requires large-scale expansion of basic school infrastructure and upgrading of facilities in existing schools.

The task of providing primary school education to all children requires stepping up of expenditure on primary education. Parikh (1999) mentions in his development report that total annual expenditure required for universal primary schooling is of the order of Rs 281 billion, i.e. about 2.8 per cent of GDP annually to provide adequate quantity and quality of primary schooling compared to current expenditure of 1.5 per cent on primary education. The expenditure required for those currently not in school is of the order 1.8 per cent of GDP. Table 2

envisages the estimated plan expenditure on school education/per pupil at different points of time. Per pupil plan expenditure increases from Rs 8.82 in 1951 to Rs 216.3 in 1998. The situation is even worse when per capita plan expenditure on general education is taken into account. It is estimated nearly Rs 0.74 in 1995 and achieved a level of Rs 46.67 by the end of 1998. As stated earlier, the GOI had promised to increase public spending on education from 3.4 to 6 per cent of GDP during the Eighth Five Year Plan. Needless to mention, the promise is not fulfilled in the Ninth Five Year Plan. This awaited promise should be fulfilled.

New Economic Policy and School Education

The public and private sector³ are playing major role in imparting education everywhere since time immemorial. The public sector is entirely under control of Government agencies due to financial dependency on civil estimates. On the other hand, the role of the private sector in catering education has substantially increased in recent years in the wake of India's New Economic Policy (NEP) as adopted by the GOI in August 1991, and characterised by liberalisation, privatisation and globalisation. The role of private sector in gross domestic capital formation in GDP has increased substantially from 13.1 per cent in 1991 to 14 per cent in 1998. Moreover, the increase in gross domestic capital formation in GDP since 1951 to 1991 has been almost negligible (Table 2). Such increase in capital formation has certainly direct/indirect impact on educational development in the country.

Now, most of the private educational entrepreneurs believe that schools are a good source of investment to make money, and it has become an important business to emerging private educational entrepreneurs in the country due to lack of provisions in educational policies on running the educational institutions, particularly at pre-primary, primary and upper primary stages. Money spent on running schools yield substantial dividends in terms of economic returns to the entrepreneurs.

It is found and even perceived by the teachers and parents that the private school management boards are a fund raising bodies giving rise to serious concerns of equity in case of poor communities in the present era, and is violation of NPE in regard to equal access and opportunity for all up to school stage and improvement of quality at all levels (GOI, 1999). The private schools will have adverse impact on the weaker sections of the society and will prove to be disastrous for the political parties in power at the Centre and State levels. If 50 million or so be disastrous for the political parties in power at the Centre and State levels. If 50 million or so illiterate children along with their family unite and lobby against private schools for free education, no Government can afford to ignore their demand unless the party in power deliberately chooses to commit a political suicide. Being a sensitive instrument for human development, no Government can afford to deny the access of school education of satisfactory quality to the aspiring parents to educate their children.

The private schools should have an obligation with respect to achieve the

goal of NPE. There should be legislations to work out the modalities for private schools about their involvement in discharging this important duty. However, the Central/State Governments have not framed a Regulatory Authority on Education (School) by an Act to monitor the entry of private educational entrepreneurs on satisfactory quality of school education. This entry may be permitted in those areas where public funded schooling facilities are inadequate/lacking. The Government should impose on the private school management boards to adopt the *National Curriculum Framework* and textbooks for school education prepared by the NCERT⁴ or so and other issues of national concern to develop a quality citizenry. If any authority on school education came into existence, her role was confined to conduct the examinations, collection of surcharges, taxes, fees, etc. and award the degree/diploma/certificate for existing private sector on education. Hence, a methodology has to be worked out to remove such bottlenecks in developmental process of education for the private sector in public interest. It will certainly help bringing a quality education.

Conclusion

This paper has sought an overview of India's educational development policies and programmes in school education and explored the measures thereof. From forgoing analysis and discussion, following policy directions and measures can be distilled for providing future interventions:

- The education development policy on school education should be viewed as an integral part of India's national development policy and due considerations given to its direct and indirect effects on other sub-sectors of the economy and vice-versa. This can be achieved only if a systematic approach of development is adopted. This approach will enable the planners to take into account beneficial and harmful effects of the educational development on other sectors and vice-versa.
- There is a need for common structure and duration of school education under different educational stages across the States/UTs in the country. All important educational statistics/indicators are exhibiting growth over the period of study, although, growth may be marginal/substantial from the arithmetic viewpoint. The promise of

Government to increase the share of spending on education from 3.4 to 6 per cent of GDP is still awaited. However, the First Indian Census Report of twenty-first century reveals that total literacy rate is around 65.38 per cent. Hence, the Government has floated a new scheme, SSA, to bring 100 per cent literacy in India.

- The Government should effectively regulate entry of private educational entrepreneurs in school education in the larger interest of public, viz, children and their parents. This entry may be permitted in those areas where public funded educational facilities are inadequate/lacking. The Government should ensure the implementation of the *National Curriculum Framework* and textbooks prepared by the NCERT or so on private school management boards for quality education vis-a-vis citizenry.

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Activity-based Joyful Learning Approach

A Strategy for the Achievement of Interdisciplinary Competencies

B.N. PANDA*

TAPAN KUMAR BASANTIA**

Abstract

Achievement of interdisciplinary competencies through the teaching of one discipline is a recurring challenge of present-day teaching-learning process. At the primary stage of our school education, the subject Environmental Studies seems to be a suitable curricular medium, through the teaching of which the competencies of many other areas can be developed. The main focus of the present study is to examine the effectiveness of activity-based joyful learning approach (ABJL) over traditional method of teaching (TMT) in achieving interdisciplinary Minimum Levels of Learning (MLL) competencies (in the selected four areas of language, awareness to physical-social environment, health and hygiene, and art and craft) through the teaching of environmental studies. The entire study was divided into three main phases. The first phase of the study included the design of the experiment. In this phase, competencies in four areas, i.e. language, awareness to physical-social environment, health and hygiene, and art and craft were identified and suitable activities were developed in the subject of Environmental Studies to achieve these competencies. Test items were developed both for pre-test and post-test and a mastery level was fixed to categorise the children into masters and non-masters. Eighty children (40 for control group and 40 for experimental group) were selected randomly for the present study. The plan of action of the study was chalked out at the second phase. In the second phase, at first, pre-test was administered to both groups. Then, the control group was taught through TMT approach and the experimental group was taught through ABJL approach. Just after the treatment, post-test was administered to both groups. In the third phase, the pre-test results of both the groups were compared with their post-test results. The findings of the experiment resulted that ABJL approach is a suitable strategy for achieving interdisciplinary MLL competencies through the teaching of Environmental Studies. Educational implications were drawn to use activity-based joyful learning as a strategy of teaching-learning process in our school and appreciated the same for its divergent utility.

Key words: Activity-based joyful learning, traditional method

* Reader in Education, Regional Institute of Education, Bhubaneswar 751 022.

** Junior Research Fellow, Regional Institute of Education, Bhubaneswar 751 022.

Since knowledge is a unitary concept, it is unworthy to divide the learning units into compendium parts. Excess specialisation/fragmentation of the subject matters in the school, leads to the creation of unsound development of child's mind or partial development of his/her abilities. Therefore, it is the challenge for the teachers to find a healthy and meaningful balance between curricular depth and curricular breadth. Most of the modern educationists and psychologists put more emphasis on interdisciplinary curriculum. The works of Ausubel (1968), Neisser (1976) and others in 1960s and 1970s on schematic structure in the brain strongly supports the achievement of interdisciplinary competencies through an interdisciplinary curriculum. In the seventeenth and eighteenth centuries, the predecessors of modern psychology including Hartley, speculated that meaningful learning involves the formulation of association among the various areas of knowledge. The excess emphasis on specialised knowledge in the last few decades has paralysed our educational system. We often find our students are unable to recognise and use knowledge at the newer and different situation. This phenomenon can directly be tied to the ways in which students initially have learnt the information.

Development of interrelated competencies through an integrated curriculum has become an emerging fashion in the present-day education. While teaching one subject, it must be related with competencies of other subjects. For example, an environmental studies curriculum should include many other competencies like language

competency, art and craft competency, etc. and a language curriculum should include many other values such as social values, scientific temperament and so on. The broad field approach to curriculum framing is a stepping stone in the way of the achievement of the interdisciplinary and interrelated competencies.

At the primary school stage, the role of interdisciplinary curriculum for the development of interdisciplinary competencies is quite important. It is important due to some reasons, i.e. (i) since primary school children aren't mature enough, so the division of teaching units to different subjects creates the mental buzzing among them, (ii) it is very difficult to provide specific teachers for each and every subject, where the Governments of different states fail to fulfil the minimum requirements of OB scheme, and (iii) in our primary schools no separate teachers are appointed to teach specific subjects, rather the same teacher teaches all the subjects.

The NPE (1986) and the revised NPE (1992) emphasised on qualitative improvement in primary education and remarked that, though quantitative expansion has been made in primary education, but no such substantive progress has been made in its qualitative aspects. In this regard, NPE (1986) vehemently stated: *Education not to assess but for success*. This qualitative aspect of education is defined in terms of Minimum Level of Learning (MLL). This means all children, irrespective of caste, creed, sex, geographical differences, sectorial differences, etc. must achieve a specified level or

standard in their educational outcome. This MLL has become an emerging educational trend in 1970s and it's onward. The policy (1986) suggested to realise MLL in the educational outcome of our school children in each grade.

Activity-based joyful learning approach as a strategy of teaching-learning aims at securing maximal participation of students in the teaching-learning process. Almost all the children love fun and show interests towards play. Therefore, activity-based joyful learning follows the principles of learning by playing, learning by doing, learning by enjoying and learning by problem-solving. This approach required the involvement of multi-sensory organs of the child in the teaching-learning process. Much of the researches have been conducted on different teaching-learning strategies relating to joyful learning activities and the results found to be positive. The dramatisation method of Kulkarni (1991), Co-operative teaching technique of Malhotra (1998), Objective-based teaching and testing of Palanivelu (1989), Video instruction following by teachers' discussion mode of Sharma (1991), Personalised system of instruction of Das Gupta (1987), Modular approach of Dhamija (1985), activity teaching-learning of Majumdar (1977) and others showed fruitful results.

Among the subjects studied at the primary level, Environmental Studies (EVS) occupies the most important place. Because it is single curricular area through which the competencies of different other areas can be developed. In the present study, efforts have been made to judge the effectiveness of activity-based joyful learning approach

over the traditional method of teaching approach in achieving MLL competencies of different subject areas of language, awareness to physical-social environment, health and hygiene, and art and craft through the teaching of environmental studies.

Method

Settings

The study was conducted in a co-educational English medium primary school. Students from Classes I-V study there. The school admits students from varying backgrounds. Students (forty for control group and forty for experimental group) were selected from Class III for the present experiment. Simple random method was followed for selection of the subjects. The entire process of the study was divided into three main phases, as described below.

Design of the Study

Indentification of Competencies: Competencies in four major areas of language, awareness to physical-social environment, health and hygiene, and art and craft were identified. The language competency area in general included: sub-competencies like correctness in reading, sentence-making, dictation writing, etc. The areas of awareness towards physical-social environment included: sub-competency areas of awareness towards natural and social environment, functional relationship between man and his environment, use of different natural and artificial resources for the benefit of the man and so on. Parts of the body

and their function, personal hygiene and sanitation, food and nutrition, physical exercise and related activities, etc. were included under the area of health and hygiene competency. Similarly, art and craft competency area included: sub-competencies like clay modelling, drawing, painting, drama and decoration and so on. These competencies are nothing but learning objectives.

Development of Activities: Since the target was to develop all the above-stated competencies through the teaching of environmental studies, so, different activities were developed to teach environmental studies to achieve the same. Steps were taken to make each and every activity joyful and child centred. The nature of activities in a particular area of competency was different from the nature of activities in other areas of competency, basing upon their specific objectives. For example, activities meant for the development of language competencies weren't necessarily the same with the activities meant for development of art and craft competencies. Some of the exemplar activities meant for developing competencies in specific areas, following in the present experiment are given in Table 1.

Development of Tests: Two sets of competency-based tests were developed, i.e. competency-based pre-test and competency-based post-test. The test items included in both pre-test and post-test are based on four areas of competency, i.e. language, awareness to physical-social environment, health and hygiene, and art and craft. All the items

were selected on the basis of the contents included in the subject Environmental Studies of Class III. The nature of test items and the preparation of the test items in both pre-test and post-test were the same, only the contents of the tests were different. The details about the test items are given in Table 2 and Table 3. Items of both the tests were both written and performance type. Scoring was done on the basis of scoring keys developed by the researchers. A minimum competency level was fixed. Those who scored 80 per cent or more marks were called "masters" and those who scored less than 80 per cent marks were called "non-masters" in case of each test (pre-test and post-test). Since total marks in overall competency area was 100 in each test, so the children securing 80 marks or more were called masters in overall competencies and the children securing less than 80 marks were called non-masters in overall competencies in each test. The total marks in each competency area was 25 in case of each test. The children who scored 20 marks or more than that in a specific competency area were called masters in that specific competency area and those who scored less than 20 marks were called non-master in that competency area in case of each test. The tests were validated with the help of experts' judgements.

Procedure of Experiment: "Randomised-two group-pre-test-post-test" design was followed for the experiment. Forty children for control group and forty children for experimental group were selected. Administering pre-test on both the groups baseline data were collected for future comparison. After

TABLE 1
Development of Activities

Sub- ject	Compe- tency areas	Sub-compe- tency areas	Activities followed
Environmental Studies	Language	Writing	The teacher showed many written paragraphs in a chart and compared these paragraphs on the basis of style of writing, correctness in spelling, correctness in grammatical aspects and coherence in writing in front of the children. Children were assigned to write meaningful sentences/paragraphs in card board papers. The teacher compared those writings of different children, evaluated them and accordingly suggested for the improvement.
		Reading	The teacher himself read the paragraphs meaningfully with proper stress and intonation. While reading, the teacher changed his gesture, posture, style of reading, etc. The teacher used audio-video tape in order to differentiate the nature of reading of prose, poetry, letter, essay, etc.
	Awareness to Physical-social Environment	Identification of the role of different personnels, for the benefit of the members of the society.	The children were taken to the different social institutions like shop, police station, hospital, park, bank, etc. by their teacher and they observed the activities of the personnel involved in those institutions. They also noted down the entire activities which were rendered in those institutions for the benefit of the members of the society.
		Identifying and observing different types of rules that the individuals should follow	In order to give the children knowledge about traffic rules, zebra crossing, signaling, railway track, etc. play-way method was followed. The teacher had organised such type of play in school playground with the help of children in which the elements of traffic rules, signalling, etc. were found.
	Health and Hygiene	Part of human body and their functions	A simulated drama was organised by the teacher with the help of children. Each child was assigned to act as a part of body. In the drama, it was shown that, what would be the result, if the parts of the body will not work jointly.
		Personal hygiene and sanitation	Competitions were organised among children on the basis of hygienic habits like cleanliness in dressing, righteous way of walking, standing, behaving, etc. Similarly, charts containing the picture of different hygienic situations were shown. Flash cards on health and hygiene were shown to the children.
	Art and Craft	Drawing and painting	The teacher himself drew different pictures on papers. He instructed and guided the children for drawing the different pictures. The teacher also provided the necessary materials to the children for drawing and painting the pictures.
		Clay modelling and wood working	To give first aid experience to the children, the construction of different items from clay were shown to them. The teacher guided the children to prepare pen stand, boxes, etc. with the help of small pieces of wood materials.

TABLE 2
Pre-test

Subject	Competency areas	Number of items	Total marks	Percentage of marks
Environmental Studies	Language	5	25	25%
	Awareness to Physical-social Environment	3	25	25%
	Health and Hygiene	4	25	25%
	Art and Craft	3	25	25%
	Grand Total	15	100	100%

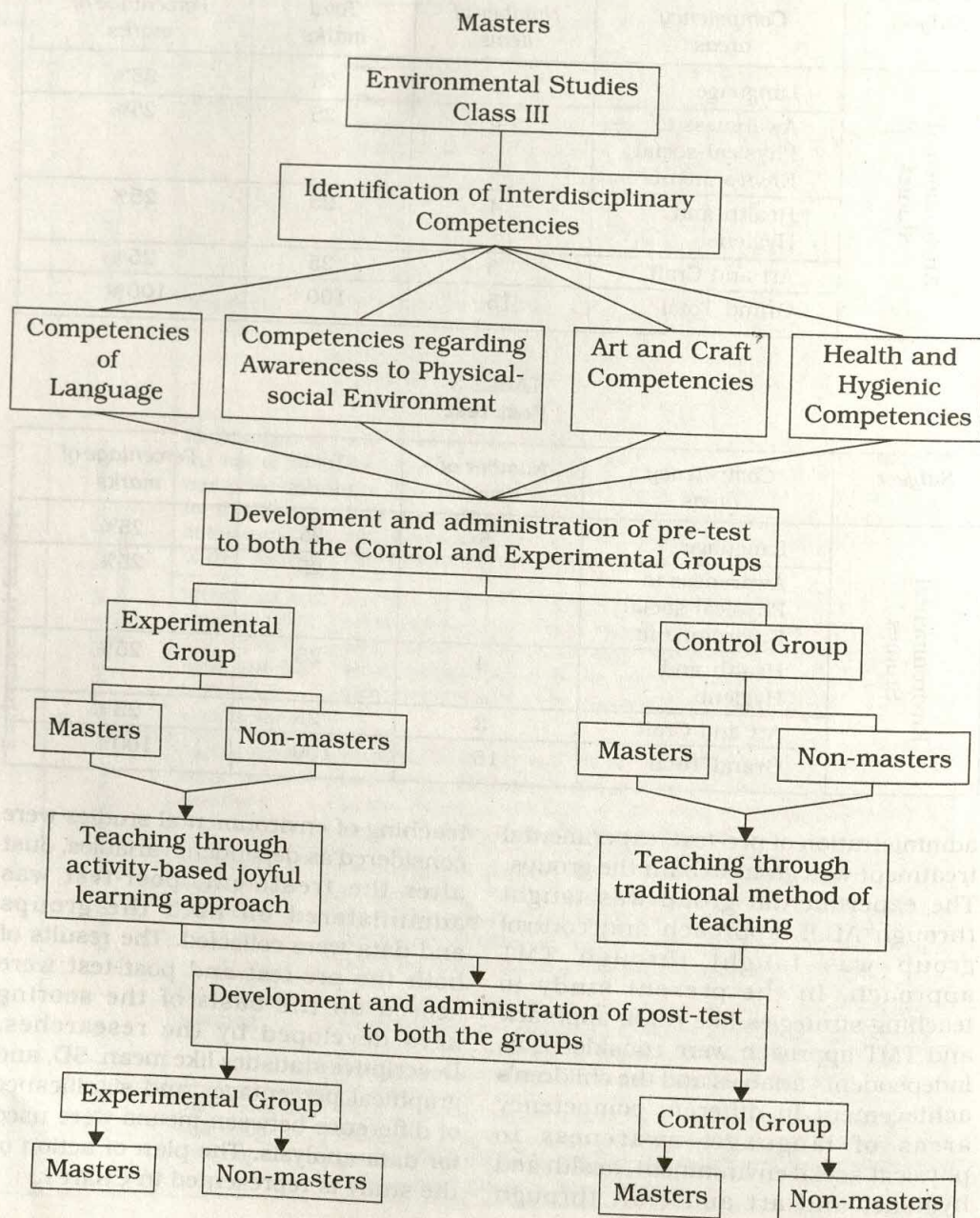
TABLE 3
Post-test

Subject	Competency areas	Number of items	Total marks	Percentage of marks
Environmental Studies	Language	5	25	25%
	Awareness to Physical-social Environment	4	25	25%
	Health and Hygiene	4	25	25%
	Art and Craft	3	25	25%
	Grand Total	16	100	100%

administration of pre-test, experimental treatment was given to both the groups. The experimental group was taught through ABJL approach and control group was taught through TMT approach. In the present study to teaching strategies like ABJL approach and TMT approach were considered as independent variables and the children's achievement in different competency areas of language, awareness to physical-social environment, health and hygiene, and art and craft through

teaching of environmental studies were considered as dependent variables. Just after the treatment, post-test was administered on both the groups and data were collected. The results of both the pre-test and post-test were scored on the basis of the scoring keys developed by the researches. Descriptive statistics like mean, SD, and graphical percentages and significance of difference between means were used for data analysis. The plan of action of the study is represented in Chart I.

CHART I
Plan of Action of the Study



Results and Discussion

The results of the present experiment were analysed under two broad heads. One is, studying the effect of ABJL approach over TMT approach in achieving overall competencies of languages, awareness to physical-social environment, health and hygiene, and art and craft through teaching of EVS. And, the other one is, studying the effect of ABJL approach over TMT approach in achieving competencies in the specific areas of language, awareness to physical-social environment, health and hygiene, and art and craft through the teaching of EVS. The differences between pre-test results of both control and

experimental groups were compared with the differences between post-test results of both control and experimental groups. The result showed the significant change in experimental groups from pre-test to post-test in all cases. But such result was rarely found in case of control groups. In order to study the performance of the groups from one stage to another "t" test was used. In addition to mastery level comparison was also made at mean level. Because, mastery level comparison not necessarily give always fruitful result. In some cases, even if significant difference is found in mastery level performance, but that might not be significant at mean level

TABLE 4
Rated Performance of the Subjects Before and After the Treatment
(On overall competencies)

	CG at the mastery level Performance		EG at the mastery level Performance	
	Pre-test	Post-test	Pre-test	Post-test
CG	N = 40 M = 5 % of M = 12.5	N = 40 M = 8 % of M = 20	N = 40 Mn = 66 SD = 12.9	N = 40 Mn = 68.5 SD = 11.00
	"t" value=0.35● df = 78	"t" value=5.36● df = 78	"t" value=0.81● df = 78	"t" value=5.77● df = 78
EG	N = 40 M = 4 % of M = 10	N = 40 M = 32 % of M = 80	N = 40 Mn = 68.13 SD = 10.25	N = 40 Mn = 81.5 SD = 9.15

Mean level Performance shown in figural form

Group	Pre-test	Post-test
CG	66	68.5
EG	68.13	81.5

For 78 df, $P_{0.02} = 2.38$
For 78 df, $P_{0.10} = 1.66$

- Directional hypothesis is accepted both at 0.02 and 0.10 level of significance for 78 df.
- Directional hypothesis is rejected both at 0.02 and 0.10 level of significance for 78 df.

TABLE 5
Rated Performance of the Subjects Before and After the Treatment
(On specific competencies)

σD at the mastery level Performance		σD at the mastery level Performance	
Pre-test	Post-test	Pre-test	Post-test
Language area			
CG N = 40 M = 4 % of M = 10	N = 40 M = 9 % of M = 22.5	N = 40 Mn = 15.72 SD = 3.33	N = 40 Mn = 16.47 SD = 3.51
"t" value=0.35● df = 78	"t" value=5.36● df = 78	"t" value=0.81● df = 78	"t" value=5.77● df = 78
EG N = 40 M = 4 % of M = 10	N = 40 M = 32 % of M = 80	N = 40 Mn = 18.78 SD = 3.18	N = 40 Mn = 19.52 SD = 2.4

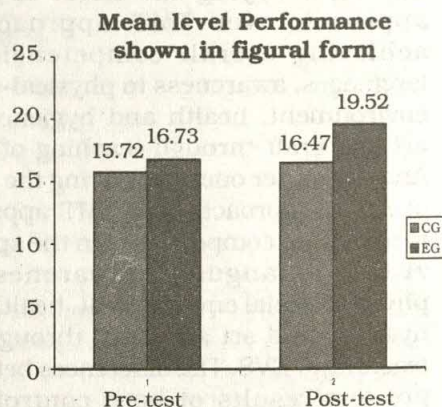


Fig. 2

Awareness to physical-social environment area			
CG N = 40 M = 6 % of M = 15	N = 40 M = 12 % of M = 30	N = 40 Mn = 17.23 SD = 3.31	N = 40 Mn = 17.68 SD = 3.5
"t" value=0.35● df = 78	"t" value=5.36● df = 78	"t" value=0.81● df = 78	"t" value=5.77● df = 78
EG N = 40 M = 2 % of M = 5	N = 40 M = 31 % of M = 77.5	N = 40 Mn = 17 SD = 2.52	N = 40 Mn = 20.85 SD = 2.31

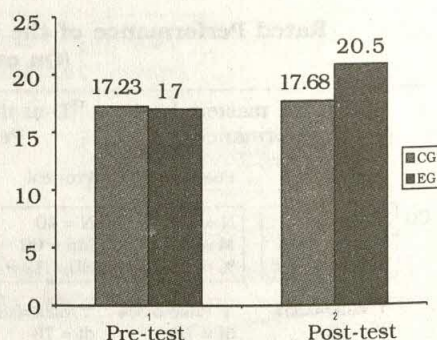


Fig. 3

Awareness to physical-social environment area			
CG N = 40 M = 6 % of M = 15	N = 40 M = 12 % of M = 30	N = 40 Mn = 17.23 SD = 3.31	N = 40 Mn = 17.68 SD = 3.5
"t" value=0.35● df = 78	"t" value=5.36● df = 78	"t" value=0.81● df = 78	"t" value=5.77● df = 78
EG N = 40 M = 2 % of M = 5	N = 40 M = 31 % of M = 77.5	N = 40 Mn = 17 SD = 2.52	N = 40 Mn = 20.85 SD = 2.31

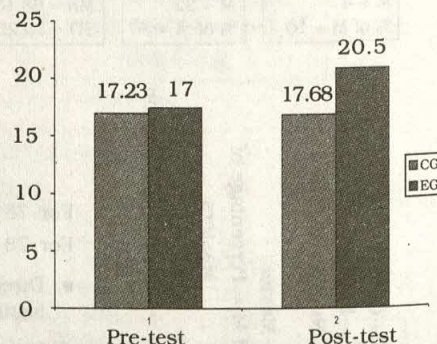


Fig. 4

Awareness to physical-social environment area				
CG	N = 40 M = 6 % of M = 15	N = 40 M = 12 % of M = 30	N = 40 Mn = 17.23 SD = 3.31	N = 40 Mn = 17.68 SD = 3.5
	"t" value=0.35 df = 78	"t" value=5.36 df = 78	"t" value=0.81 df = 78	"t" value=5.77 df = 78
EG	N = 40 M = 2 % of M = 5	N = 40 M = 31 % of M = 77.5	N = 40 Mn = 17 SD = 2.52	N = 40 Mn = 20.85 SD = 2.31

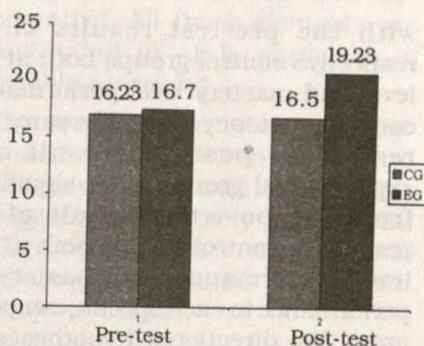


Fig. 5

performance. Such thing happens when the mean of the control group is very much adjacent to the mean of experimental group and mastery level difference is found to be significant between control and experimental group. And also sometimes, the masters in one group is more than the masters in another group but the mean score of the group having more number of masters fall in below than the mean score of the group having less number of masters. Table 4 somewhat states this. In this Table the pre-test result states that the percentage of masters in the control group (12.5%) is more than the percentage of masters (10%) in the experimental group. But the same Table reads the mean of the control group (66) is less than the mean of the experimental group (68.13).

Table 4 displays the development of competencies in the overall areas of language, awareness to physical-social environment, health and hygiene, and art and craft. While the pre-test result of the control group was compared with the pre-test results of the experimental group both at mastery level and mean

level, the directional hypotheses were rejected at 0.02 and 0.10 level of confidence in both the cases. But with regard to the comparison of post-test scores, the experimental group showed better performance than the control both at mean level and mastery level performance. The directional hypotheses were accepted both at 0.02 and 0.10 level of confidence in both cases. So it was concluded that ABJL approach has merits over TMT approach in achieving overall competencies of language, awareness to physical-social environment, health and hygiene, and art and craft through teaching of EVS. The change in achievement of overall competencies from pre-test to post-test is also shown in figural form (given in Fig. 1) for better understanding.

Table 5 notices about the effect of ABJL approach over TMT approach in developing competencies in specific areas of language, awareness to physical-social environment, health and hygiene and art and craft. The directional hypotheses were rejected both at 0.02 and 0.10 level of confidence, when the pre-test results of experimental groups were compared

with the pre-test results of their respective control groups both at mean level and mastery level performance in each competency area. The same Table reads, the post-test result of the experimental groups differ significantly from the post-test result of their respective control groups both at mean level performance and mastery level performance in each specific competency area. The directional hypotheses were accepted at 0.02 and 0.10 level of confidence in each. The experimental groups showed better performance than their control groups. Therefore, it was inferred that ABJL approach has merits over TMT approach in achieving competencies in the specific areas of language, awareness to physical-social environment, health and hygiene, and art and craft through teaching of environmental studies. The change in achievement in different specific competency area is also shown in Figs. 2, 3, 4 and 5.

Another point can also be remarked from the study is that, in all cases the experimental groups had shown better performance in their post-test scores in comparison to their pre-test scores, but such result hasn't found always in case of control groups. In some cases, after the treatment, the control groups even had shown low performance in post-test results in comparison to their pre-test results. In Table 4, in the area of specific competencies of health and hygiene, the number of masters of the control group in pre-test result was 7 but after the treatment in TMT approach, the number of masters were reduced to 4 in post-test result. Similarly, the mean level comparison in the same competency

area states that, the pre-test mean score of the control group was 17 but in post-test the mean of the same group was reduced to 16.8. This signifies that instead of developing the competencies in specific areas of learning, the TMT approach also even had reduced the achievement in specific areas of learning. But such instance is hardly found in the results of experimental groups who were taught through ABJL approach. Taking into consideration the aforesaid discussions, it can safely be concluded that ABJL has merits over TMT approach in achieving inter-disciplinary MLL competencies through teaching of environmental studies.

Educational Implications of the Study

Activity-based joyful learning approach as an emerging trend in the field of teaching methodology/strategy, is important for our school education, specially for the elementary level due to the following reasons:

- ABJL acts as a suitable approach for imparting unified knowledge to the children, because it helps to achieve interdisciplinary competencies through teaching of one discipline.
- This approach is psychological because it gives respect to the needs, interests and abilities of the children. This is why the common methods of teaching followed in this approach are dramatisation, play-way, learning by doing, learning by enjoying, etc.
- This approach aims at developing scholastic and co-scholastic aspects

of the child simultaneously, because the activities engaged in this approach of teaching include all the domains of behaviour, i.e. head related activities, hand related activities and heart related activities.

- Since the children are engaged in divergent activities like games, puzzles, competitions, etc., so their manifold creative and cognitive abilities develop simultaneously.
- This approach not only develops children's learning but it develops the teachers' competence in teaching. Because, when the teachers are engaged in preparation and use of different activity materials, they get experiences and outlooks in teaching through different ways.
- The present system of learning always wants that our learning

environment must be democratic, congenial, satisfying and co-operative. All these elements are facilitated in ABJL approach of teaching-learning.

- The recent trend of competency-based comprehensive and continuous evaluation always suggests that activity-based joyful learning is the best approach to achieve competencies in different subjects/areas.
- This approach is life centred in the sense that the activities selected for the teaching-learning are based upon the daily life situations.
- Since ABJL approach facilitates the achievement of interdisciplinary competencies through teaching of one discipline, so this approach is suitable for single teacher/meagerly staffed schools.

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Will/Shall and Be Going to and Future in English

NASIRUDDIN KHAN*

Abstract

This paper deals with 'will/shall' and 'be going to' as the most commonly used means of expressing future in English. It addresses the two-fold problem of there being no exclusive syntactic forms in English to refer to future as well as the mix-up of futurity and modality in the forms available. Presenting a brief review of literature, it draws mainly on examples to subscribe to the idea that 'will/shall' and 'be going to' are the most widely used ways of referring to future. There is a brief summing up of teaching implications at the end.

Key words: Future in English, Will, Shall, Be going to, Infinitive

The future tense in English has always been a 'problem area' both to the grammarian and the teacher alike. The reasons are syntactic as well as semantic. On the one hand, there are no clear-cut syntactic forms to refer to future exclusively; on the other hand, the problems of future tense in English involve not only aspects of activity and time but also moods (certainty, hesitation, willingness, determination, obligation, etc.) with which the speaker

views what is to come. Leech (1971:52) has summed up the confusion of future and modality in these words: "We cannot be as certain of future happenings as we are of events past and present, and for this reason even the most confident prognostication must indicate something of the speaker's attitude and so be tinged with modality."

Does future tense in English exist or not? And, if it does, what is it? Henry Sweet was quite clear about it: "We call

* *Reader in English*, Department of Education in Social Sciences and Humanities (DESSH), NCERT, New Delhi 110 016.

was the preterite tense of the verb *to be*, *is* be present and *will be* the future tense of the same verb" (Sweet 1900:97). But Jespersen raised some doubts. He questioned the way in which grammarians were used to give a paradigm of the combination of 'shall' and 'will' as a tense to be compared with the preterite or the perfect. Jespersen found the future with 'will' to be frequently coloured by an element of volition, and the future with 'shall' by an element of obligation. Also, he noted a variety of means, which English uses to refer to future, none of which could be termed 'future tense' in the way that *is* present and *was* preterite.

Poutsma (1926), while maintaining that future tense is formed by means of the auxiliaries 'shall' and 'will', hastily adds that the modal and tense values of 'shall' and 'will' are often inextricably mixed.

Martin Joos goes farther, declaring that it is "..... about time to dispose of the notion that 'will' is a future tense auxiliary" (Joos 1964:159). He considers the frequent occurrences of 'be going to' in the *Trial*, a story based on reports of a famous trial in London, and concludes that this "seems to be the only uncoloured future that English has."

Linguists like Barbara Strang (1962) and F.R. Palmer (1974) deny that future tense exists in English, and place 'will' and 'shall' in a scheme, for the modals. But Palmer agrees that 'shall/will'

sometimes indicate simple futurity. Palmer's arguments, briefly, are that

- (i) The future is not marked morphologically in English;
- (ii) 'will' and 'shall' are modal auxiliaries functioning as 'can' and 'may', which can also refer to the future;
- (iii) 'will' is used for functions other than future reference; and
- (iv) there are other ways of referring to future time.

It is clear, then, that some grammarians hold the view that English has no proper tense form for future; some say that 'will' and 'shall' form the future tense; while some opt for 'be going to', and some others allow a whole range of means of referring to future time.

Reference to Future Time

There are five important ways of expressing future time in English (see Leech 1971:51; Close 1962:96)*. They are:

- (i) Will/shall + Infinitive:
The postman will call tomorrow.
John will leave on Monday.
- (ii) Be going to + Infinitive:
The postman is going to call tomorrow.
John is going to leave on Monday.
- (iii) Present Progressive:
The postman is calling tomorrow.
John is leaving on Monday.

* Close does not include 'will/shall + Progressive Infinitive' in his list. He uses 'be to + Infinitive' in its place. Leech lists the five types in their order of importance and frequency, pointing out that "all have their particular nuances of meaning, and are far from being generally inter-changeable" (Leech 1971:51).

(iv) Simple Present:

The postman calls tomorrow.

John Leaves on Monday.

(v) Will/Shall + Progressive Infinitive:

The postman will be calling tomorrow.

John will be leaving on Monday.

I Shall attempt to describe only the first two types, their differences in meaning and overtone. My choice is based on the fact that 'will/shall' + Infinitive has been exhaustively discussed in the literature available, and is generally considered to be the most widely used means of referring to future and 'be going to + Infinitive' is "the next most important way of expressing future time" (Leech 1971:54). I shall refer to the accounts of these two verbal constructions by Leech (1971), Close (1962) and Wekker (1976).

Will/Shall + Infinitive

Will/Shall + Infinitive is the most commonly used construction to express future time in English. It is the most problematic, too, particularly from a teaching point of view. 'Will' and 'shall' have a double function of modal auxiliaries and auxiliaries of the future tense. Leech points out: "The two functions are so closely intermingled that it is difficult to separate them." (Leech 1971:52). Close favours the treatment of 'will/shall' as two separate linguistic items, namely, the modal and non-modal items. Modal means 'non-factual', that is, uses which refer to an event or state not as a fact but as a possibility or as something desired or demanded. Non-modal means 'factual'. When 'will/shall' are used non-modally,

they indicate a *factual looking forward in time* from the moment of speech, which is what futurity essentially means.

'Will' and 'Shall' have the contracted form 'll most commonly used in speech. 'Will' is commonly used with all three persons, 'shall' with first person (and also with second or third person only as a modal auxiliary). The difference between 'you will die' and 'you shall die' is merely this: The former is a prediction (a factual, 'uncoloured' looking in time), the latter a threat.

Close specifies three occasions for his own use of 'shall' with 'I' and 'we':

- (i) When a repetition of 'will' is to be avoided in a complex/compound sentence;
The telephone will never ring, and I shall never have to answer it.
- (ii) When 'I will' might sound more assertive than 'I shall', the latter is to be preferred; and
- (iii) When a repetition of /w/ sound in 'we will' is to be avoided, which often sounds undesirable, 'shall' is to be preferred.

This is an arbitrary and subjective classification, and has no linguistic or pedagogical significance whatsoever.

Wekker (1976:67) holds the view that the essential function of 'will' is to mark futurity, that is, to predict or anticipate. Since future reference is based on the speaker's knowledge, beliefs and assumptions, his statement may range from a factual statement about something that has been arranged to a more tentative hypothesis about what will happen. "Futurity and volition are closely related notions; therefore, future reference is frequently

coloured by a volitional overtone of some kind." Wekker presents some syntactic criteria to support his argument that 'will/shall' of futurity are tense auxiliaries.

- (i) Sentences containing 'will/shall' of futurity can be passivised.

John will meet Mary.

Mary will be met by John.

The use of 'will' in the above example contrasts with that of the 'will of volition', which cannot be passivised without radically changing the meaning.

John won't meet Mary.

Mary won't be met by John.

- (ii) 'Will/shall' of futurity do not normally occur in temporal and conditional (if) clauses, while 'will of volition' does in these environments.

If you do that, you will make matters worse.

If you will do that, I'll see that you won't regret it.

- (iii) Future 'will' may be used in the same way as the past tense.

The man you were talking to was the Professor of Linguistics. The man you will be talking to will be the Professor of Linguistics.

- (iv) The past tense forms of the two auxiliaries — 'would' and 'should' — are not used as expressions of future-in-the-past, except in reported speech.

* * *

Consider the following:

1. It'll be winter soon.
2. He'll be ill after this.
3. She'll be able to come.
4. He's got cancer. He'll die before he is fifty.

All the above can be considered 'clear' cases of future tense, because in all the cases it seems unlikely that 'will' contains any notion of desire or intention.

Now consider this:

5. He'll wake everybody up.

Sentence 5 is controversial, because it may well refer to an intentional act. Since intention implies desire, it may be claimed that 'will' in it is a modal auxiliary. Whether it is 'modal or 'non-modal' will depend upon the context of situation. If the sentence is part of some factual narrative of anticipated events answering the question 'What will happen next?' then, the answer 'He will wake everybody up', is an ordinary future tense like examples 1, 2, 3 and 4. On the other hand, the sentence could indicate willingness. This notion can only be present as a reflection of the context, as for example, if the sentence was a response to 'He must do something to help in the morning.' Or, it could imply a command: It is my intention that he should wake everybody up. If so, the auxiliary must again be termed modal since it would imply desire on the part of the speaker.

Further Examples

1. Spread your clothes where they will drip and dry.
 2. I don't know what Mr. Higgins will say.
 3. I'll never be a great linguist.
 4. Next week we'll learn the true nature of the event.
 5. You'll come of age next year.
- (These examples indicate simple futurity. There is no trace

whatsoever of willingness, intention, and the like.)

6. The only relative I know of, Doctor, is a daughter in America. I'll cable her, naturally.
7. If he should decide to instruct us further in the matter, we'll let you know.
8. Then he came on again. 'Mr Hanakar is about due for a visit anyway', he said. 'We'll fly over today. What's the weather like?' (These examples can be said to express the speaker's willingness or intention, and can, more specifically, be interpreted as promises or commitments).
9. I'll see they get you, old man, on that glorious day when the bloody revolution dawns.
(The last sentence sounds more like a threat than warning).

* * *

'Will' and 'shall' appear largely interchangeable with the first person subject, irrespective of whether they signal simple futurity or volitional futurity. Examples 6, 7 and 8 can be rewritten with both 'will' and 'shall' without changing meaning.

Be going to + Infinitive

In an article in *English Language Teaching* (1970), R.A. Close makes a distinction between 'future-oriented' and 'present-oriented' expressions of futurity in English. Expressions which 'predict' an event or state are 'future-oriented', whereas 'present-oriented' expressions are those which may contain "present indications of what the future may bring" (Page 230). Close describes 'be going to' constructions as 'present-oriented'. The

essential point, he maintains, of this construction is a focus on some present factor which the speaker feels will lead to a future event. That factor can be decision, intention, preparation, or it can be an obvious symptom of what the future will bring. 'Be going to' is common in conversational English. Following are some examples:

- You are going to break that toy.
(the way you are playing with it.)
- I am going to catch flu.
(the symptoms are clear.)
- It's going to rain tomorrow.
(It's cloudy today.)
- We're going to understand it eventually.
(We're working hard now.)

Comparing 'be going to' with 'will' (which he calls 'future-oriented'), Close points out that 'will' is preferred to the former when emphasis is on present signs, intention, preparation, etc. is absent or irrelevant.

Compare the following:

- (a) 'The telephone is ringing'. 'All right, I'll answer it.'
- (b) I'm going to answer his letter, point by point.
(The situation in 'a' does not require any emphasis, whereas in 'b' it suggests a sequence of decision, action and ultimate fulfilment.)
- (c) I think I'll sell my car.
- (d) I don't like my car. I'm going to sell it.
(d' is a statement of a considered intention and its possible consequence but in 'c' the idea of intention is absent.)
- (e) Tomorrow is going to be a busy day.
- (f) Tomorrow will be Tuesday.
(e' suggests planning and

preparation, but 'f' has no such evidence.)

- (g) I'm going to read your essay this evening, and I'll discuss it with you tomorrow.

(There is emphasis (amounting to decision) on the first action, but it is not repeated on the second).

Leech (1971:54) considers the general meaning of 'be going' to + infinitive' construction to be "future fulfilment of the present", which corresponds to Close's 'present-oriented' label. Leech's categorisation is more detailed than that of Close in that he discriminates between two meanings of this construction, namely, the future culmination of: (i) present intention, and (ii) present cause. He further distinguishes the use of the former chiefly, with human subjects and with 'doing' or 'agentive' verbs (as opposed to verbs of state), and the use of the latter with animal and inanimate subjects, as well as with human subjects.

- I am going to stay in my room and write my essay today.
(Present intention, human subject)
- They are going to elope and get married.
(Present intention, human subject)
- She is going to have a baby.
(Present cause (or symptom), human subject)
- I think I am going to faint.
(Present cause, human subject)
- There is going to be a storm soon.
(Present cause, inanimate subject)
- This horse is going to be the winner.
(Present cause, animal subject)
- The pile of boxes is going to fall.
(Present cause, inanimate subject)

Leech also points out that 'be going to' is inappropriate in future conditional sentence, except when the condition is a present one rather than a future one.

- If you take my advice, you'll never regret it.
- If you take my advice, you are never going to regret it.
- You are going to find yourself in comfort if you take my advice.

The other two important points which Leech makes about the meaning of 'be going to' are that (1) imminence is not a necessary semantic accompaniment of this construction, and (2) it does not guarantee that the predicted happening will actually come to pass. The latter is illustrated best with Past tense forms.

- I am going to be an author when I grow up. (It may take a long time)
- If scientists know what they are talking about, the sun is going to be a cold lump of clay in a few billion years. (The figure is mind boggling)
- He was going to challenge me to a dual, but on mature consideration he changed his mind. (didn't happen)
- I was going to fail the exam, but the examiner turned out to be short-sighted. (I passed)

'Be going to' may refer to immediate future or distant future, which is determined by the future tense adverbial the speaker chooses to use.

- There is going to be a storm in a minute.
- I am going to be an acrobat when I have done with linguistics.

Wekker (1976) calls 'be going to' construction not a proper auxiliary but "a suppletive form and a variant" (page 18). He discusses the various uses of this form and distinguishes between its stylistic and semantic factors. Wekker's is a corpus-based analysis. He makes use of the notions of 'present orientation' and 'immediate futurity', as analysed by Close and Leech, and presents examples from the corpus to substantiate the following points.

- (i) Stylistically, 'be going to' belongs primarily to informal spoken English;
- (ii) Its uses are 'present' rather than 'future' oriented;
- (iii) The intention expressed by it (as against 'will') is always accompanied by 'premeditation'.

Present indications or orientation:

- Within a few years Paris is going to look like London and London like New York.
- I am not going to marry someone who leaves his *pyjamas* on the floor.
- The rock is going to fall. (Intention accompanied by premeditation).
- I've sold my car; I'm going to take up cycling.
- I am going to call you George, and you'll call me Bernard.

Implications for Teaching

1. It is necessary to base the teaching of the expression of futurity in English on what one understands by the term 'tense', which in turn depends on where one decides to draw the line between tense and mood. Futurity lies very close to this line, and this is reflected in the

different uses of 'will' and 'shall', some of which can be called modal (non-factual) and some non-modal (factual). The non-factual uses are those which refer to an event or state not as a fact but as a possibility or as something desired or demanded. The factual ones are those, which indicate a looking forward in time from the moment of speech.

2. With regard to the uses of 'shall/will', the following can be said to be the most important:

- (i) They are used in contexts in which it is appropriate to make 'predictions'. 'Predication' is used here as synonymous with prognostication making a 'factual' statement about future not tinged with the speaker's desire, intention, or willingness. Such a neutral use is possible, and common, in weather forecasts.

- tomorrow's weather will be cold and cloudy. The temperature will fall to 2° celsius.

Prediction is not confined to weather forecasts alone. It applies to other situations also, and will/shall is used to express them.

- The next budget will be a severe one.
- You will feel better after a check-up.
- Perhaps he will change his mind after he has spoken to his wife.

- (ii) They are commonly used in the main clause of conditional sentences, where they cannot be

replaced by other verbal constructions for future.

- If you work hard, you will succeed.
- If you work hard, you are going to succeed.
- If you come to my house, I'll offer you Indian food.
- If you pull this lever, the window will slide back.

(iii) 'Will/shall' are often used to make prophetic statements. This is also like prediction, but it should be differentiated from the prediction discussed in point 1. In the following example, prediction sounds like a prophetic statement:

- In twenty years time, the average employer will work twenty-four hours in a week.
- She will have a baby girl next year.

(iv) They are often used to refer to a state or event in the past from a point of orientation in the future—'past in future'—in which case they are followed by the perfect infinitive:

- By next Sunday, I'll have finished all my assignments.
- By next week-end I'll be sick of exams; I'll have had two exams last week and another two in the coming week.

3. 'Will' can be used for all persons, both in statements and questions.

4. Declarations of intent with 'I'll' and 'we'll': These are common in the spoken language and are often followed by 'shall I?' and 'shall we?'. They should be an important item in any communicative syllabus.

5. In the teaching of questions, 'shall' can be ignored as a future tense auxiliary.

- (a) Will I be ill after this?
- (b) Will I be able to come?
- (c) Will I die before I am fifty?
- (d) Will I wake everybody up?

These are ordinary future tense questions implying 'what will happen?' 'What do you anticipate?' Changing 'will' to 'shall' makes little difference to a-c, though to some native speakers it may sound a bit odd. But in the case of 'd' the difference is clear. With 'will' it can only be interpreted as a 'What-do-you-wish' question, i.e. Do you want me to wake everybody up or not?

6. 'Will you (please)?' Requests of this kind in which 'will' indicates willingness needs to be specially taught. So also does the 'Won't' of refusal, including its use with inanimate things as in

The door won't open.

The fire won't light.

('Can't' is often quite inappropriate here.)

7. The use of an adverbial of definite time in sentences with 'will/shall' should be emphasised. Sentences like 'It will rain' and 'The room will be cleaned' sound incomplete on their own. Without an adverbial like 'tomorrow' or 'next week' they remain 'factually empty'.

8. Be going to + Infinitive is an indivisible construction. It should not be confused with a combination of 'go' with the infinitive of purpose.

- (a) *I am going to see my friend. (I intend to)*

- (b) *I am hoping to see my friend.*
(I hope he will come, and I will see him.)
This distinction should be made clear. Example 'a' alone refers to future.
9. 'Be going to' is very often, though not always, used to refer to the immediate future where it is interchangeable with 'is about to + V' or 'is on the point of + V-ing'. Sentences with 'be going to', but without a time adverbial, almost always refer to immediate future.
10. Since 'be going to' is a fixed construction, it has no non-progressive form. However, the infinitive part of the construction can be used in perfect and progressive forms:
I am going to have finished my work by the time they arrive.
They are going to be watching football next Friday afternoon.

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Role of Emotional Intelligence in Educational Management

SWATI PATRA*

Abstract

The success of any organisation in the long run depends very much on the quality of its human resources. The significance of human resource lies in its dynamic nature. The key objective in the management of any organisation should be to provide various kinds of learning experiences to its people with the objective of developing human beings for their advantage and harnessing their physical, mental, emotional and intellectual endowments and abilities for the growth of the organisation. For this, emphasis should also be placed on the emotional aspect of the human resource besides the cognitive aspect. In this regard, emotional intelligence has emerged as the crucial factor in the successful management of organisations. Emotional intelligence can help in creating an enthusiastic work environment, employee satisfaction, efficient administration, useful vision for the future and achieving organisational development. Hence, educational management will also do well to incorporate practices of emotional intelligence, thus leading to emotional quality management in the organisation.

Key words: Emotional intelligence, Educational Management

The success of any organisation in the long run depends very much on the quality of its human resources. Of all the prime resources of an organisation namely, man, material, money, the human resource is recognised as the most vital and the most valuable because it's ultimately the human being who uses and controls all other resources and

determines the efficient utilisation of these resources. Further, the importance of the human factor also stems from the fact that whereas all other resources depreciate in value with the passage of time and use, the human resource appreciates in value through the acquisition of knowledge and experience. Thus, human resource reflects an

* Lecturer, Regional Institute of Education (NCERT), Bhopal, Madhya Pradesh.

inherent dynamism and development potential.

Earlier, the emphasis was on product. The approach was task-oriented and focus was on the output or the achievement. But the product approach has given way to the process approach, i.e. the factors involved in the process of the achievement of an organisation. And among these factors, the human factor is the most important one. People orientation is the key thing in the success of an organisation today. The significance of human resource lies in its dynamic nature. Human resource is the aggregate of employee attributes including knowledge, skill, experience and health which are presently and potentially available to an organisation for the achievement of its goal. The key objective in the management of any organisation should be to provide various kinds of learning experiences to its people with the objective of developing human beings for their advantage and harnessing their physical, mental, emotional and intellectual endowments and abilities for the growth of the organisation.

Unfortunately our management policies, be it in the educational set-up or any other organisational set-up emphasises only on the cognitive aspect of the human resource, whereas the emotional or affective aspect of human resource is neglected. Emotional competence is as important, sometimes more important than academic competence in managing the organisation. As a child will not learn if he does not 'want' to learn or feel the 'need' to learn despite having good ability or intelligence; similarly an employee will

not put in his maximum effort unless his emotional needs are taken care of. Human being is not merely a cognitive man, possessing various abilities and skills. He is also an emotional being which determines the effective and efficient utilisation of his cognitive abilities.

People constitute the active resource of any organisation, who really determine the efficiency and utilisation of all other resources. The most unique feature of human resources is that their contribution can enhance considerably through adoption of an effective management policy based on emotional intelligence parameters. The measure of the growth of an organisation depends upon the thrust-drag ratio—the ratio of the force of the thrust that the organisation makes in moving forward and the force of the drag that pulls the organisation backwards. Hence, the human resources with all their skills, capabilities and potentials have a key role in improving the thrust-drag ratio of an organisation.

In view of the importance of the emotional aspect of the human beings in their productivity, the educational or the emotional aspect of the human beings in their productivity, the educational administration and management policies should also reflect this orientation. A sound management practice should take into consideration the factor of emotional intelligence. Such an approach will help in creating an organisational culture which will not only contribute to the professional well-being and motivation of employees and enable them to self-actualise, but also help increase the capability of an

organisation to attract, retain and motivate talented employees.

It was Daniel Goleman (1996) who has pioneered the concept of emotional intelligence. It is increasingly recognised that intelligence (IQ) accounts for only about 20% of a person's success in life. The balance 80% can be attributed to emotional intelligence (EQ). Research and experience clearly demonstrate that while some aspects of our personality are fixed, we may choose the way we want to act these out. In other words, we do not choose our characteristics or many of the events in our life, but we can choose how to react to them. In simple terms, emotional intelligence can be defined as knowing what feels good, what feels bad, and how to get from bad to good. A more formal academic definition refers to emotional awareness and emotional management skill which provide the ability to balance emotion and reason so as to maximise productivity and happiness.

Emotional intelligence includes traits like self-awareness, social deftness, the ability to delay gratification, to be optimistic in the face of adversity, to channel strong emotions and to show empathy towards others. Goleman identifies the five elements as the components of emotional intelligence: Self-awareness, Self-regulation, Motivation, Empathy, and Social Skills.

Self-awareness

The key to success is knowing oneself. Self-awareness is knowing one's internal states, preferences, resources, intuitions, etc. It indicates the ability to recognise, understand and accept one's own moods, emotions, drives, strengths

and shortcomings as well as to see how these affect other people. According to Goleman, self-awareness includes the following three important steps:

- *Emotional awareness:* It means recognising one's emotions and becoming aware of how their feelings and emotions affect their as well as other's performance.
- *Accurate self-assessment:* It refers to a candid sense of one's personal strengths and weaknesses. One becomes aware of one's blind spots and able to find the roads to improvement. Persons with this ability are clear, reflective, eager to learn from experience, show interest for self-development.
- *Self-confidence:* Knowing about oneself gives one confidence. These people are decisive, assertive and have a strong sense of one's self worth.

Thus, an awareness of one's emotions, assessment of one's strengths and weaknesses and self-confidence help persons to emotionally managing not only themselves but also others in their relationships and dealings.

Self-regulation

Self-regulation refers to managing and handing impulses, distressing feelings and upsets rather than denying or repressing these feelings. It implies making a choice as to how we express our feelings. Self-regulation helps in staying compose, focussed, calm and helps think clearly even under pressure. Self-regulation has five steps.

- *Self-control:* In Buddha's view self-control is the secret of happiness.

Self-controlled persons can manage their emotions effectively and face defeat and success with equanimity.

- *Trust-worthiness*: Trust-worthiness means displaying honesty and integrity. These are credible, take responsibility for their actions and are principled.
- *Conscientiousness*: It involves commitment. They fulfil their obligations, make attempts to keep their promises.
- *Adaptability*: Adaptability deals with flexibility in handling challenges and changes. They can choose and smoothly handle situations and their responses to the circumstances are so effective.
- *Innovation*: Innovation implies to novel ideas, approaches and new information. Their perspective is very wide which helps them in coming up with original solution to problems.

Motivation

Motivation helps in the achievement of goals. It is an ability to pursue goals with energy and persistence. It provides the drive and zeal to shape our thoughts and actions. Three important motivational competencies are as follows:

- *Achievement drive*: It refers to striving to improve or meet a standard of excellence. They are result-oriented. They take calculated risks and readily face any type of challenges.
- *Commitment*: it refers to aligning oneself, identifying oneself with the goals of a group or organisation.

They don't yield to any pressure or threat.

- *Initiative and Optimism*: People with emotional balance take a lot of initiatives and they are generally optimistic. They have the ability to seize opportunities, mobilise others to get things done, pursue goals in the face of obstacles, be flexible to get the jobs done, see the positive side of things. The mere physical presence of persons with high motivation makes a lot of difference in the atmosphere. Their optimistic view encourages others.

Empathy

It refers to the ability to put oneself into another's shoes and look at things or think from his point of view. It can be called the foundation skill for all the social competencies. Emotionally balanced people are generally empathetic and not sympathetic. Empathy includes the following.

- *Understanding others*: The person tries to understand others by trying to know his feelings and showing interest in his welfare. They are very sensitive.
- *Service orientation*: Service-orientation means reorienting the service aspects by anticipating, recognising and meeting the consumers' needs. An emotional bond is created between the buyer and seller. Products are matched with customers' needs, trying to increase customer satisfaction and loyalty.
- *Leveraging diversity*: It means being sensitive to group differences and

relate to people according to their background. They see diversity as opportunity and create an environment in which diverse people can survive.

- *Developing others:* They recognise other's strengths and accomplishments and help them in developing their personality. They provide useful feedback, give timely coaching, offer challenging assignments.
- *Political awareness:* It means reading a group's emotional currents and power relationships. It is being aware of the social and political currents of the situation, to accurately read key power relationships, to detect crucial social networks, to understand forces that shape views and actions of clients and competitors.

Social Skills

Social skill is an ability to build rapport with various sections of society and create network of people. It includes the following competencies:

- *Influence:* Influence is the effective tactic for persuasion. These people are skilled at winning people over and build consensus and support.
- *Conflict management:* It refers to negotiating and resolving disagreements. Conflict management helps to handle difficult people and tense situations with tact and encourage debate and open discussion.
- *Leadership:* Leadership is inspiring and guiding individuals and group. Emotionally balanced leader is person-oriented, inspires members for a shared vision mission.

- *Change catalyst:* Change catalyst is initiating and managing change. They recognise the need for change, challenge the *status quo* and champion the change.
- *Communication:* Communication has a significant place in emotional intelligence. It means listening openly, sharing of information, receptive to other's views.

Emotional intelligence is what determines our potential for learning practical skills which are based on these five elements of knowing one's emotions, managing one's emotions, taking initiative, empathy and adeptness in relationships.

Our emotional competence shows how much of this potential is translated into on-the-job capabilities, e.g. providing good customer service is an emotional competence based on empathy. Similarly, trustworthiness is a competence based on self-regulation. Emotional competence is a learned capacity based on emotional intelligence that leads to outstanding performance at work. It refers to the harmonious combination of head and heart. The five essential components of emotional intelligence and the competencies based on these abilities are crucial for success in personal, social and work life, e.g. if someone is deficient in social skills, he will be inept at persuading or inspiring others or leading teams or catalysing change. If his self-awareness is low, he will be oblivious of his own weaknesses and may lack the self-confidence which comes from knowing their strengths.

Emotional intelligence and emotional competence have several benefits. At the work place it is not enough to have the

knowledge of work or subject/content mastery. The person has to work along with others. So he should be adept in handling relationships with others. Often we come across such statements like, she is jealous of her colleagues, the boss shows favouritism, the boss/head is too sensitive, the clerk is always in a hostile mood; the authorities are insensitive to the employee's needs and demands, etc. Emotional intelligence can help in dealing with these by creating a culture which is more caring, giving, supportive and enriching where each is regarded as an individual and feelings are respected.

Thus, in educational management, emotional intelligence can help a lot. As an administrator, one's ability to impact and influence others is closely related to connect and use one's emotions. People are rarely influenced by logic alone. Feelings and emotions are equally important. In the changing competitive

environment one needs more than just brains to achieve organisational development. Emotional intelligence can help in creating an enthusiastic work environment and efficient administration. It also helps the management to create useful vision for the future of the organisation. They can proceed from the current circumstance to the vision of preferred future with ease. Compared to persons who simply go on describing their dissatisfaction over the current state of affairs, emotional intelligent leaders/managers focus on taking actions which increases the likelihood of success.

Emotional intelligent leaders understand the range of choices they have in establishing relationship with others. And they choose the appropriate one depending on the situation. One of the clearest ways to represent the possible choices in a relationship is through the relationship-task grid.

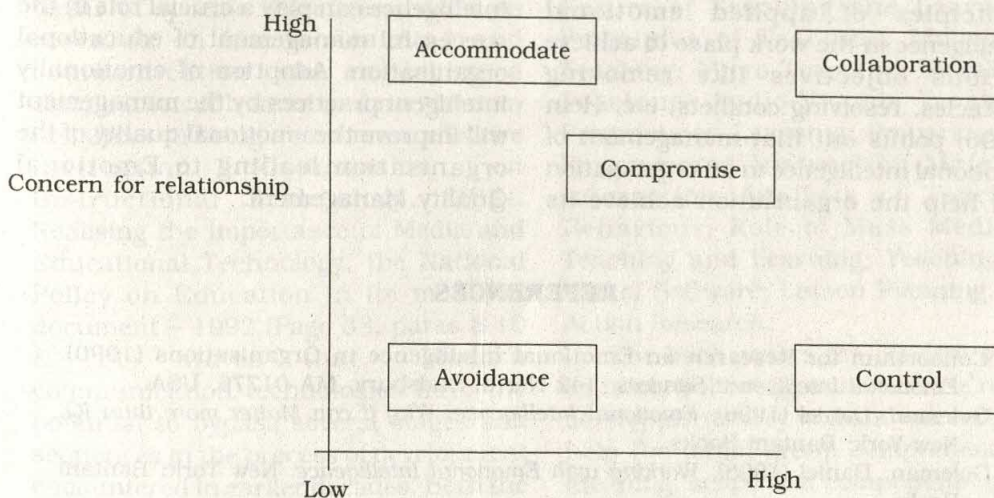


Fig. 1: Relationship-Task Grid

The high-high or collaborative position is the most productive in the long run. It is characterized by collaborative problem-solving, shared vision of goals and mission and by win-win situations that focus on meeting the underlying interest of all. This 'grace under pressure' is a good indicator of emotional competence of the person. However, each of the possibilities in the relationship-task grid can be justified depending on the times and circumstances. And emotional intelligent managers and administrators understand this.

Data (Goleman, 1998) indicate a very strong positive correlation between emotional intelligence of leaders and the performance of organisations. The more the leader exhibits emotional competencies like initiative, nurturing others, team leadership, self-confidence, drive to achieve and empathy, the more effective is the performance. They are able to integrate and utilize the principles of applied emotional intelligence in the work place to achieve various objectives like removing obstacles, resolving conflicts, etc. Hein (1996) points out that management of emotional intelligence in an organisation will help the organisation achieve its

goals, at the same time enhancing its employees' satisfaction.

The Consortium for Research on Emotional Intelligence in Organisations (1999) provides guidelines for development of emotional intelligence in organisations. Effective emotional intelligence training programme can occur in five phases: preparation for change, training, transfer and maintenance, and evaluation. Here it can be noted that emotional learning is different from cognitive and technical learning, and that emotional learning is different from cognitive and technical learning, and that it requires a different approach to training and development. For example, it is not enough to know that one needs to relate to and consult other people; but one should also learn how to do it. The ability to do these things calls for emotional competence, which includes both emotional learning as well as cognitive learning. To conclude, it can be said that emotional intelligence can play a crucial role in the successful management of educational organisation. Adoption of emotionally intelligent practices by the management will improve the emotional quality of the organisation leading to Emotional Quality Management.

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Book Review

New Dimensions of Educational Technology. R.P. Pathak, Radha Publications, 4378/4-B, Ansari Road, Daryaganj, New Delhi, 2003, pp. 222, Price Rs 225/-.

Since the dawn of human civilisation, human beings have always been trying to excel in all the fields to bring better quality to life. This has resulted in advancement in science and technology for improving life conditions. The world has now become a global village. Technological application in all walks of life is a major reason for the globalisation. The impact of technological developments is also visible in the education sector as well, i.e. in the area of teaching and learning.

Educational Technology (ET) is a systematic way of designing, implementing, and evaluating the total process of learning and teaching in terms of specific objectives, based on research on human learning and communication and employing a combination of human and non-human resources to bring about more effective instruction (Commission on Instructional Technology, USA). Realising the importance of Media and Educational Technology, the National Policy on Education in its modified document - 1992 (Page 38, paras 8.10 & 11) states that, "Modern communication technologies have the potential to bypass several stages and sequences in the process of development encountered in earlier decades. Both the constraints of time and distance at once become manageable. In order to avoid

structural dualism, modern education technology must reach out to the most distant areas and most deprived sections of beneficiaries simultaneously with the areas of comparative affluence and ready availability. Further it has stated that ET will be employed in the spread of useful information, the training and retraining of teachers, to improve quality, sharpen awareness of art and culture, inculcate abiding values, etc. both in formal and non-formal sectors.

Much has been written in the area of ET for clarification of concepts and extension and dissemination of innovations in the area. The book under review is one of them.

The book covers a wide range of topics and consists of 16 chapters, which are given as under: Educational Technology: Scope and Development; Structure of Educational Objectives; The Nature of Teaching and Learning; Principles of Teaching; Models of Teaching; Micro Teaching; Simulated Teaching; Audio-Visuals Teaching; Programmed Learning; Preparation of Programmed Instruction Material; Interaction Analysis of Teaching Behaviour; Role of Mass Media in Teaching and Learning; Teaching the Use of Software; Lesson Planning; and Action Research.

The book covers the concept of ET, its historical background and the recent developments very well and will certainly help the target group comprehend the meaning, scope and components of ET. The chapters related to educational objectives, principles and models of

teaching, micro teaching, simulated teaching and audio-visual teaching, use of hardware and software, mass media in teaching and learning could be helpful to the pupil teachers, teachers and teacher educators in effective transaction of curriculum in their respective areas of expertise. The themes related to programmed learning, preparation of programmed instructional materials, interaction analysis and systems approach may equip the target readers in designing need based instructional materials as well. The references given at the end of each chapter is an appreciable idea of the writer and could be of great help for the readers of this book, especially those who want to refer original sources for in-depth studies.

The book, though makes an attempt to bring in all aspects of ET and its developments in India, lacks to provide information on recent developments. Some of them include:

- The developments related to the exclusive educational TV Gyan Darshan (GD) launched in January, 2000 and now running round the clock with four channels GD-1, GD-2, GD-3 & GD-4) and Radio Channel (Gyan Vani FM Stations started since September, 2001) launched by the Government of India should have been mentioned in the introductory chapter and the chapter highlighting the role of mass media in teaching and learning. These channels transmit educational media programmes for the clientele group starting from preprimary to tertiary level of education.
- Suitable examples related to different models of teaching should have been given by selecting few themes/topics from various subject areas along with the steps followed in the model.
- Other teaching skills should have been illustrated with appropriate examples as done in case of the skill related to questioning.
- Nowadays media supported distance education model, i.e. audio, video and computer conferencing have been widely used for training and retraining of teachers. It is a better way of training and having advantage over the other two traditional models face-to-face and cascade model (two or three tier system). The commendable job initiated in the regard and executed continuously by the organisations like NCERT, NIOS, IGNOU, IITs should have been highlighted in the chapter on the role of mass media in teaching learning.
- Different kinds of projectors play a crucial role in presentation of contents in an effective manner. However, many important projectors, i.e. slide projector, film projector, Liquidated Crystal Display (LCD), Digital Light Processing (DLP) which are vividly used by teacher education organisations have not been mentioned in the chapter teaching the use of hardware and software. Even the criteria followed while developing transparencies for OHP, slides and tape slides for slide projectors, slides for computer

aided power point presentations and filmstrips have not been placed in this chapter.

- Incorporating the chapter on lesson planning is a good idea. But putting only theoretical aspects of the lesson planning solves very little purpose of the potential readers of this book. Hence some model lesson plans should be prepared keeping in view the educational technology components in mind and suitably placed in this book.
- The chapter on action research is self-explanatory. While practising an action research it is often observed that the practitioners often confuse while selecting problems and identifying action point which are in their control. Hence, situations/examples/aspects related to access, enrolment, retention and learning or any others could have been given in this chapter. Some topics on which examples of action research could have been given by following broad steps of action research are given as under:
 - a) A mathematics teacher finding students of Class III not able to do well in arithmetic though she

had the mathematics background herself.

- b) A committed and hardworking language teacher (teaching mother tongue) observing a number of spelling mistakes and pronunciation problems among Class V students.
- c) A hardworking, motivated and enthusiastic teacher facing the problem of large size class (65 students) in Class I.

Overall the author has done a commendable job in bringing out this book and spread the concept of Educational Technology. The book is certainly worth reading and will help not only enhance one's own knowledge but also pave ways for giving due weightage to education especially in the effective transaction of curriculum for quality improvement of teacher educators, planners, administrators, curriculum framers/designers and researchers in the area. In spite of few typographical errors, the document maintains good publication ethics and the quality of printing and the paper used add to quality of the book.

Amarendra Prasad Behera

Central Institute of Educational
Technology (CIET), NCERT
New Delh-110016
Email: amar_b2000@yahoo.com

THE CONSTITUTION OF INDIA

PREAMBLE

WE, THE PEOPLE OF INDIA, having solemnly resolved to constitute India into a **[SOVEREIGN SOCIALIST SECULAR DEMOCRATIC REPUBLIC]** and to secure to all its citizens :

JUSTICE, social, economic and political;

LIBERTY of thought, expression, belief, faith and worship;

EQUALITY of status and of opportunity; and to promote among them all

FRATERNITY assuring the dignity of the individual and the [unity and integrity of the Nation]

IN OUR CONSTITUENT ASSEMBLY this twenty-sixth day of November, 1949, do **HEREBY ADOPT, ENACT AND GIVE TO OURSELVES THIS CONSTITUTION.**

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